

# **A Comprehensive Approach towards Transparency:**

Case Study on Highway Development through Public  
Private Partnership (PPP) in India

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## **Abstract**

Transparency has become a buzzword in contemporary planning literature. However, it is not a well-delimited concept. The term is defined differently based on different fundamental philosophical positions. Public–private partnerships in infrastructure development are claimed to offer a more transparent and accountable planning process than the traditional model. This study argues that transparency in infrastructure-PPPs is narrowly defined. There are two reasons for such an argument. Firstly, there is no comprehensive literature on the overall process of infrastructure development through PPP, and existing studies on transparency focus narrowly on specific phases. Secondly, transparency has different roles to play in different phases of development. There are hardly any studies that investigate transparency in various phases throughout the project cycle.

As opposed to restricted transparency advocated by theories on PPP, this study argues that transparency should be maintained throughout the project cycle in order to ensure that public interests are protected in public decision-making. A theoretical framework is developed to investigate transparency both in depth and breadth, beyond mere ‘disclosure of information’. In depth, transparency is explored in terms of its mechanisms, its stated and bigger purposes, and barriers to it. Here, theory of transparency is connected to theory of procedural justice to emphasise the importance of achieving transparency in a democratic society. In breadth, this framework with depth of transparency is investigated in three major phases in the project cycle. These phases are identified significant in terms of transparency.

This thesis is dedicated to my family and friends, for their love,  
immense support and relentless encouragement in fulfilling this  
dream.

I wholeheartedly thank God for giving me the strength to go  
through the process.

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Although there is a personal touch in this professional account, I consider this as necessary self-reflexivity that was important to present prior to the thesis resulting from my four years' study of a particular subject such as 'transparency' that focuses upon trust, expectations and clear behaviour. It is also relevant here that these personal characteristics were reflected in my way of approaching the research problem. I also acknowledge the continuous support of my colleagues from this department. I would especially like to mention the names of Brenda Galvan Lopez, Friday Ogwu, Tugce Sanli, Sobia Ahmad, Elizabeth Brooks and Jenny Crawford, to whom I looked for support at various points. Nevertheless, this piece of research is also dedicated to my family, extended family, and friends back home who have also made sacrifices by allowing me the necessary solitude required for the sake of this higher study. I hope I can make better use of this degree, and particularly the knowledge acquired through such international exposure.

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## **Abbreviations**

ADB	Asian Development Bank
BOO	Build Own Operate
BOT	Build Operate Transfer
CCL	Central Coal Limited
CEO	Chief Executive Officer
CMA	Calcutta Metropolitan Area
CPI	Corruption Perception Index
CRR	Cash Reserve Ratio
CSF	Critical Success Factor
DBB	Design Bid Build
DBFO	Design Build Finance Operate
DBFOT	Design Build Finance Operate Transfer
DBM Layer	Dense Bitumen Macadam layer
DPR	Detail Project Report
EIA	Environmental Impact Assessment
EJ	Environmental Justice
EOI	Expression of Interest
EPC	Engineering, Procurement and Construction
EW	East-west
FDI	Foreign Direct Investment
FOI	Freedom of Information
GoI	Government of India
GQ	Golden Quadrilateral
GT Road	Grand Trunk Road
HREL	Hazaribagh Ranchi Expressway Limited
IC	Independent Consultant
IE	Independent Engineers
IL&FS	Infrastructure Leasing and Finance Services
IMF	International Monetary Fund
JARDCL	Jharkhand Accelerated Road Development Construction Limited
JRPICL	Jharkhand Road Planning Infrastructure Company Limited
JV	Joint Venture
MCA	Model Concessionaire Agreement

MoEA	Ministry of Economic Affairs
MoRTH	Ministry of Road Transport Highway
NH	National Highway
NHAI	National Highway Authority of India
NHDP	National Highway Development Plan
NPM	New Public Management
NS	North-south
PD	Project Director
PFI	Private Finance Initiative
PPP	Public Private Partnership
PWD	Public Works Department
RBI	Reserve Bank of India
RCD	Road Construction Department
RMC	Ready Mix Concrete
ROB	Rail Over Bridge
ROW	Right of Way
RRR	Ranchi Ring Road
RTI	Right to Information
RTFCT	Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013
SEZ	Special Economic Zone
SIA	Social Impact Analysis
SJ	Social Justice
SPV	Special Purpose Vehicle
SVB	Second Vivekananda Bridge
SVBTC	Second Vivekananda Bridge Tollway Company
UN	United Nations
UT	Union Territory
VFM	Value for Money
VGF	Viability Gap Funding
WB	World Bank



## **Section I: Introduction**

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### **[Chapter 1]**

# Chapter 1. Introduction

## 1.1 Statement of problem

The traditional public-sector procurement model for infrastructure delivery has been historically affected by misinformation on cost, benefit and risk, leading to the misuse of public money (Flyvbjerg *et al.*, 2003). Public–Private Partnerships (PPPs) evolved as an efficiency model to overcome such weaknesses. Besides being such a model, it became politically popular as it claims to deliver infrastructure outside the public-sector balance sheet (Siemiatycki, 2007; Miraftab, 2004). This led to the mainstreaming of PPP for modernising infrastructure, especially in the global South. Transparency is identified as one of the four components of the accountability framework. However, PPPs advocate for restricted transparency as compared with the traditional model. However, policymakers currently speak out in favour of improved transparency of PPP projects throughout the project cycle as it delivers public infrastructure and uses public money in the long run.<sup>1</sup> But the questions arise: what is transparency and what does it do?

## 1.2 What is transparency?

Transparency is not a very well-delimited term. It has been defined in many ways from various fundamental positions. In a democracy, it is defined as the disclosure of information about the public sector's way of working (Florini, 2007). It is popularly known as a component of good governance and maintains public-sector accountability. The development planning studies discuss transparency for its instrumental role, for instance, as an anti-corruption tool (Sen, 1999). Transparency International defines 'corruption' as misuse of entrusted power for private gain (Cockcroft, 2012). From a neo-liberal point of view, transparency is a prerequisite of private-sector investment and is defined as disclosure of information on public policy indicating how one's investment would work (Stiglitz, 2003).

Although the basic definition of transparency remains 'disclosure of information', the concept is wider and complex. Heald and Hood (2006) offer a framework on categories of transparency depending on direction, timing and content of information disclosure. With this framework, they show how a unidirectional way of operationalising

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<sup>1</sup> <http://www.firstpost.com/politics/let-their-be-transparency-in-ppp-projects-says-pm-81935.html>  
accessed 1 June 2013

transparency can still lead to a non-transparent setting from another perspective. Moreover, the above discussion shows that transparency is operationalised for certain purposes in mind. For instance, improved transparency would reduce the chances of corruption. Corruption leads to serious issues such as inequality and injustice in society that disproportionately harm the poor (Civil Society's draft for Lokpal Bill, India, 2011).<sup>2</sup> Hence, improved transparency would lead a society towards a condition of greater equity and justice. Therefore, the development planning literature not only develops its strong connection with the theory of justice beyond 'disclosure of information', but also strongly encourages scholars to explore its bigger purposes.

### 1.3 Transparency in PPP

Transparency is a contested concept in PPP as public- and private-sector actors have contradictory methods of maintaining public-sector accountability. PPP's framework of accountability considers transparency as one of the four components (Flyvbjerg *et al.*, 2003). Here, transparency is discussed not only as a one-way flow of information, but also as a two-way flow in relation to stakeholder involvement from the earliest stages of project development to deliver efficient projects. One main concern has been the private sector's legitimate demand for confidentiality of their trade secrets (Siemiatycki, 2007). Siemiatycki (2007) mainly shows how project design could have been improved with enhanced transparency and recommends the use of a watchdog body to protect public interests in PPPs. Hood *et al.* (2006) provide evidence to show that there is secrecy in PPPs from both the public- and the private-sector sides. The contemporary literature on transparency is based around whether PPPs are really value for money (Greve and Hodge, 2011).

In practice, international organisations have played an important role in improving transparency and accountability of PPP models in infrastructure delivery. International organisations such as the United Nations Development Programme (UNDP) provide guidelines on what a transparent PPP project and what the stated purposes of transparency are.<sup>3</sup> However, such guidelines are strictly formulated with regard to the partnership formation phase. Moreover, the question arises whether and in what capacity UNDP can enforce various levels of governments to adopt their transparency guidelines. While PPP has been mainstreamed for the delivery and modernisation of

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<sup>2</sup> <http://www.thehindu.com/news/national/article2123870.ece> accessed 1 June 2013

<sup>3</sup> [http://pppue.undp.2margraf.com/en/08\\_2.htm](http://pppue.undp.2margraf.com/en/08_2.htm) accessed 1 June 2013

infrastructure, policymakers in the global South have recently spoken out in favour of improved transparency throughout the project cycle.<sup>4</sup> This is based on two rationales: firstly, as PPP delivers public infrastructure; and secondly, as it uses public money in the long run.

I argue that the public should have access to information on the decision-making in various phases throughout the project cycle to be assured that the public interest is protected (Flyvbjerg *et al.*, 2003). However, in contrast to the literature on mega-projects, I approach the issue of transparency from a critical social science perspective. Three major phases are identified in the project cycle, significant in terms of transparency. Phase I is composed of four sub-phases. The project decision (i.e. whether to go ahead with a particular project) is vital to understand whether the project is indeed needed for public benefit. The decision to adopt PPP should justify the use of this alternative model, and the selection of the form of PPP must ensure that the particular form is context- and sector-specific. This is essential, as the profit-oriented private sector is invited into the public infrastructure sector. Partnership formation must ensure that partners are chosen on the basis of efficiency and not for personal gain. These four sub-phases are grouped under Phase I: project decision, PPP adoption, selection of form of PPP and partnership formation.

Phase II: project design and land development, influenced by the literature on large-scale infrastructure development, must ensure that the concerns of stakeholders are incorporated into the design, and that the affected population, who must also be considered stakeholders, are rehabilitated smoothly. Although the literature on transparency in PPP hardly addresses the issue of land development, it was impossible to carry out such a research study in the context of India while ignoring the issue of land acquisition, which is a critical phase of project development. Phase III: project construction and maintenance must ensure that public-sector accountability is met towards the wider population in terms of delivering a quality product. Hood *et al.*'s (2006) 'contract transparency' indicates the need to investigate transparency in this phase.

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<sup>4</sup> <http://www.firstpost.com/politics/let-their-be-transparency-in-ppp-projects-says-pm-81935.html>  
accessed 1 June 2013



## 1.4 Research question and criteria for assessment

The main research question is: how is transparency understood as a broader concept beyond mere ‘disclosure of information’ throughout the project cycle in highway developments employing the PPP model in India?

There are four sub-questions to be investigated in each phase of project development:

1. What are the mechanisms to operationalise transparency?
2. How are the stated purposes of transparency met?
3. How are the bigger purposes of transparency met?
4. What are the barriers to transparency?

In relation to the sub-question on the mechanism of transparency, I consider the following criteria, listed for each project phase, for assessing transparency in projects. These criteria are mainly identified from international organisations’ guidelines.

### **Phase I: Project Decision, PPP adoption, Selection of Form of PPP and Partnership Formation**

Table 1.1: Criteria for assessment of transparency in Phase I

	Are there clear rationales (showing public interests are protected in the decision)?	Are those rationales documented?	Are those documents easily accessible by public?
Project decision			
PPP adoption and Selection of form of PPP			
Partnership formation			

### **Phase II: Project Design and Land development**

- a. Is project information proactively disseminated amongst wider population?
- b. Is there clear information about exact impact of a project on individual’s property?
- c. Is there clear information about basis and amount of compensation offered?
- d. Is the information disclosed in a timely manner?
- e. Did the affected population understand the information effectively?
- f. Was there any window to express their concern?
- g. Was their feedback incorporated into design?

### Phase III: Project Construction and Maintenance

Table 1.2: Criteria for assessment of transparency in Phase III

	Are actors bound to the proposal after contract is awarded?	How public interests are protected in decision?	Are such decisions documented?	Are those documents accessible by wider population?
Monitoring of construction process				
Monitoring/testing of end product				

#### 1.5 Methodology and fieldwork

I adopt the critical realist approach (Sayer, 2000) as the methodological approach in this thesis, as it allows me to investigate transparency in empirical, actual and real terms. It is a qualitative study that uses multiple methods for triangulation of data. From the discussion above, as it is apparent that the concept of transparency is wider and more complex than mere ‘disclosure of information’, it is plausible that there could be mechanisms of transparency in place; however, transparency might not be achieved in real terms due to barriers of various kinds. Document analysis (both core and peripheral) and semi-structured interviews are the two main methods used here. Group interviews, non-participant observation and field notes are used as secondary methods for triangulation of data. Due to the sensitivity of the topic and hostile environment during the fieldwork, a large amount of data for triangulation comes from field notes. At times, a single case from a project has been used to elaborate on a theme. The use of a single case is justified under the critical realist approach (Sayer, 2000).

In order to understand the dynamic of the concept, especially in a development planning context, two projects are chosen from the state of Jharkhand, a region notoriously known as underdeveloped and with a lack of trust in the state by the population (Detail Project Report, Hazaribagh–Ranchi Expressway widening project, accessed in 2010 at Jharkhand, India). The first one is a national highway project, the Hazaribagh–Ranchi Expressway widening project that comes under Phase III of the National Highway Development Program (NHDP). The second one is Ranchi Ring Road, a Green Expressway, which is a state highway project. Although it can be potentially argued that

selection of such a region might produce skewed results, it is considered that its selection actually enriches the understanding of transparency in a hostile environment. Due to the lack of availability of toll model and advanced-stage projects in Jharkhand, the third project, a toll project, is chosen from a neighbouring state, West Bengal. It is the Second Vivekananda Bridge project, a project under Phase I of NHDP, and is a part of a prestigious highway development program in India, the Golden Quadrilateral (GQ) project. This project had reached its maintenance phase at the time fieldwork took place, allowing data collection from an advanced stage of the project.

## **1.6 Contribution of this study**

The first contribution of this study is to the literature of governance, understanding the broader concept of ‘transparency’, beyond its common definition of ‘disclosure of information’, in terms of the mechanism, stated and bigger purposes of transparency and barriers to it in a democracy, especially in the global South. In doing so, I aim to link the theory of transparency to theories on governance (to explore what good transparency does to a society), such as procedural justice in democratic governance, to understand the importance of transparency. I call this dimension of transparency its ‘depth’.

The second contribution is to investigate transparency in various phases throughout the project cycle using the above-mentioned criteria. While transparency has been narrowly addressed during partnership formation only in academia and practice so far, I argue for its investigation in various phases during the project cycle to ensure public interests are protected in public decision-making. As mentioned earlier, although the literature on transparency in PPP hardly addresses the issue of land acquisition, it was impossible to conduct a research on transparency, from a critical social science point of view, in India, without addressing such an important area. I call this dimension of transparency its ‘breadth’. Greve and Hodge (2011) have raised the point that transparency must be investigated throughout the project cycle. However, there are two differences in this study. Firstly, Greve and Hodge (2011) investigate different dimensions of transparency in different phases. In contrast, this study investigates the overall ‘depth’ dimension of transparency in all the phases. Secondly, the arrangement of phases is different, as this study has clustered some phases together.

## **1.7 Organisation of the study**

The main part of the study is laid out in four sections: literature review, data collection, analysis, and conclusion.

### **Section I: Literature review (Chapters 2, 3 & 4)**

**Chapter 2. Infrastructure-Public Private Partnership (PPP)** is the first literature review chapter introducing Public Private Partnerships (PPP) as a tool to modernise infrastructure. This review presents the overall literature on large-scale infrastructure development with the aim of identifying the major phases of development, significant in terms of protecting public interests in public decision-making. It first discusses the evolution of the PPP model, overcoming the weaknesses of the traditional public-sector procurement model, and its innovative framework of accountability. One of the components of the framework is transparency. The following chapter explores the literature on transparency.

**Chapter 3. Transparency** presents the salient definitions and concepts of transparency. The chapter starts with the most common representation and understanding of the term, and then develops its specific framework to investigate transparency in depth through various items from the literature. The main questions of this chapter are: What do we mean by transparency from various perspectives? Why does transparency matter? What are the potential mechanisms are? And, what are the potential barriers to transparency?

**Chapter 4. A Conceptual Framework on Transparency in PPP** identifies various phases throughout the project cycle significant in terms of transparency. This chapter mainly discusses how transparency has been addressed in PPP both in practice and in the academic literature. Finally, it develops a nested framework to investigate transparency in projects both in depth and breadth, and criteria to assess whether projects are transparent.

### **Section II: Data collection (Chapters 5 & 6)**

**Chapter 5. Methodology** outlines the research questions and sub-questions to be studied. This chapter presents the rationale behind the selection of the critical realist approach as the epistemological and methodological base. Based on its choice of methodological approach, it justifies the use of multiple methods on the grounds of data

triangulation. This chapter describes the data collection process and method of triangulation for the three phases. It also discusses the hostility on-site and, hence, the difficulty in accessing data.

**Chapter 6. The Context** discusses the highway development scenario in India and describes the planning of national and state highways through PPP. This chapter also describes selected projects for this research in terms of physical description, status and location.

### **Section III: Data analysis (Chapters 7, 8 & 9)**

**Chapter 7. Transparency in Phase I: Project Decision, PPP adoption, Selection of Form of PPP and Partnership Formation** discusses transparency in the project decision, PPP adoption and selection of form of PPP, and partnership formation stage. This chapter collectively uses the empirical evidence from three projects to show that the project identification phase is transparent, as decisions are made at a higher level of authority with a clear rationale and the policy documents are accessible by the wider population on the official website of the relevant public-sector authority. PPP, rather than the traditional public-sector procurement model, is adopted mainly through political decisions due to restricted public-sector financial resources. Market forces select the form of PPP, which is normal in a setting with resource scarcity. Interestingly, although projects are called transparent on the basis of having transparent bidding processes, public access to financial information regarding selection of the private-sector partner is legitimately restricted, increasing people's perception of corruption.

**Chapter 8. Transparency in Phase II: Project Design and Land Development** investigates the mechanisms of transparency, its stated and bigger purposes, and barriers to it in Phase II. This chapter mainly uses data from the Hazaribagh–Ranchi Expressway widening and Ranchi Ring Road projects. Empirical evidence from these two projects shows that project design is a very top-down approach, especially in the case of national highways, due to the National Highways Authority of India (NHAI) exercising the highest level of power. Stakeholder participation is part of the design process. However, this is carried out at a very early stage of the project and, hence, is very ineffective in incorporating stakeholders' feedback. Land acquisition is carried out arrogantly, using strong bureaucratic powers, without addressing the affected population's concerns. This causes the wider population to lose trust in the system.

However, the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act (RTFCT) 2013 was enacted two years after the fieldwork was conducted. It is anticipated that the new Act will largely improve the situation.

**Chapter 9. Transparency in Phase III: Project Construction and Maintenance** investigates whether public interests are protected in public decision-making during this phase. This chapter predominantly uses data from the Second Vivekananda Bridge project. The empirical evidence shows that this phase uses actors known as independent engineers (IEs) to monitor the process of construction and maintenance to operationalise transparency. However, IEs actually have very restricted powers to ensure transparency and maintain public-sector accountability. Moreover, lack of trust amongst actors can severely affect public-sector accountability in terms of guaranteeing the quality of the project delivered, leading to the misuse of public money.

#### **Section IV: Conclusion (Chapter 10)**

**Chapter 10. Conclusion** summarises the outcomes and limitations of the study and briefly outlines the key contributions. In relation to the literature on transparency, these are described as including the study's exploration of the mechanisms of transparency, its stated and bigger purposes, and barriers to it. As regards the literature on PPP, the contribution this study makes is the investigation of transparency in various phases throughout the project cycle. I conclude the study with policy recommendations and potential future research directions.

### **1.8 Summary**

This chapter introduces the existing understanding of 'transparency' and the proposed theoretical framework. It also introduces the context in which this framework of transparency will be tested, the highway development process in India using PPP, and explores various phases of PPP for which in-depth understanding of transparency can be investigated. It describes the organisation of the study in terms of the literature review, data collection and analysis chapters, and a concluding chapter that summarises its contribution to the literature.



## Section II: Literature Review

[Chapters 2, 3 & 4]

## Chapter 2. Infrastructure-Public Private Partnerships (PPPs)

*Today there seems to be agreement in government, policymaking and donor circles that the government has failed in providing infrastructure and basic services and that the country's unprecedented economic growth will suffer because of its weak infrastructure. Reportage on the gaps in current levels of investment highlight that government is not performing adequately both due to lack of funds as well as a lack of capacity to design and deliver world class infrastructure. This, according to the Government of India (GoI) and donors, necessitates private sector entry into infrastructure.*

(Baindur and Kamath, 2009: 6)

### 2.1 Introduction

Public–Private Partnerships (PPPs, or infrastructure-PPPs), also known as Private Finance Initiatives (PFIs), offer a better framework of accountability than the traditional public-sector procurement model, overcoming the latter's weaknesses. In addition, as this model has also enabled public-sector actors to deliver 'world-class' infrastructure that is claimed not to appear on the public-sector balance sheet, it has become a politically popular tool across the globe, extending its geographical spread to the global South (Noumba and Dinghem, 2005; Mia *et al.*, 2007; Akintoye, 2009; Baindur and Kamath, 2009; Jefferies and McGeorge, 2009).

Within PPP, the state's basic role is transformed from that of a provider of development to a facilitator of it, focusing on an investment-friendly environment, which includes both the physical environment, such as land for development and infrastructure, and the social environment, such as the legal and policy framework encouraging private-sector investment and assuring returns from it (Miraftab, 2004). As the PPP model has been unquestionably accepted as a new mode of infrastructure delivery for advancing economic development in the global South, academic studies and policy papers have addressed various emerging issues related to the adoption and application of infrastructure-PPPs from various disciplinary backgrounds. However, very few studies actually step back and question the adoption and mainstreaming of the PPP model from a critical social science point of view, challenging how public interests are protected in the decision-making process throughout the life-cycle of the project (Auriol and Picard, 2009).



Section 2.2 provides an account of decision-making in large-scale infrastructure projects. Section 2.3 presents a discussion on policy adoption of the PPP model. Section 2.4 mainly focuses on the characteristics of PPP, outlining its framework of accountability. Section 2.5 briefly presents Value for Money methodology and the challenges of adopting this in developing nations, and Section 2.6 discusses risk management. Section 2.7 concerns the critical success factors of partnership formation. Section 2.8 presents the outcome of research from the construction management studies on relational factors amongst actors. Section 2.9 discusses land acquisition for PPP projects, which has proven to be a critical area in PPP project development. Finally, Section 2.10 presents a brief summary of the chapter.

## **2.2 Decision-making in large-scale infrastructure projects**

This section briefly outlines the evolution of the PPP model over the traditional model for infrastructure delivery. This discussion is a part of the debate on decision-making in large-scale infrastructure projects (Flyvbjerg *et al.*, 2003). As large-scale infrastructure projects are capital-intensive, investors' decision-making has proven critical. As traditional models involve taxpayers' money, public-sector actors are held accountable to the wider population for such investment. Cost-benefit analysis on 'with or without' projects is identified as a major tool for such decision-making in the traditional model. Such analyses weight the cost and benefits in relation to pursuing or not pursuing a particular project. Although cost-benefit analyses are used as the main tool for decision-making, they are influenced by high levels of misinformation concerning the costs, benefits and risks involved in a project during the decision-making phase (Flyvbjerg, 2007a).

As Flyvbjerg and Cowi (2004) indicate, large-scale transportation infrastructure projects are characterised by inherent risks because of their long planning horizon, non-standard technology, their dependence on a multi-actor decision-making process incorporating conflicting interests and the changing nature of the project over time. As a consequence, misinformation about costs, benefits and risks is the norm. Flyvbjerg (2007a) states that three types of factor can be taken into account to explain inaccuracy in forecasting, namely technical, psychological and political-economic factors. Technical factors include inaccurate traffic forecasting due to inadequate data, honest mistakes, inaccurate prediction, lack of experience in forecasting and so on (Ascher, 1978; Flyvbjerg *et al.* 2002, 2005; Morris and Hough, 1987; Wachs, 1990). According to this explanation,

using better methods, better data and more experienced forecasters can reduce technical error. The psychological factors account for planning fallacy and optimism bias within the traditional model. In the planning fallacy scenario, project proponents make decisions based on delusional optimism rather than on a rational weighting of gains, losses and probabilities (Kahneman and Tversky, 1979; Kahneman and Lovallo, 1993; Lovallo and Kahneman, 2003). This is possible in the traditional model, as the risk capital ultimately comes from public money, and decision-makers do not have a direct stake in the project. The political-economic factors concern planners and politicians deliberately and strategically overestimating benefits and underestimating costs in order to win against competitors and gain approval and funding (Flyvbjerg, 2002, 2005). Of these three types, psychological and political-economic factors are found to be valid in explaining most empirical cases (Flyvbjerg, 2007a). Hence, one can potentially expect such factors to be present in any cost-benefit analysis, questioning such analysis as a decision-making tool.

With regard to the political-economic factors, scholars conclude that irrespective of inaccurate prediction, project proponents would have decided in favour of the project anyway, due to their vested interests in promoting the project (Bruzeliuss *et al.*, 2002; Flyvbjerg, 2009). The traditional models also suffer from cost overrun due to delays in construction, and partly due to unforeseen risk, but also as the private-sector actors have little incentive to complete the projects on time, as the additional capital is paid from public money. However, as the public sector is accountable to the wider population with regard to investing huge sums of public money in public infrastructure, policymakers still strive for better decision-making, based on closer-to-accurate forecasting and precise costs and benefits.

As a solution, scholars prescribe two measures of reform: reference class forecasting and improving the incentive structure. Reference class forecasting is a kind of peer review process for forecasting in order to get more accurate results. Improving the incentive structure considers planners as part of the problem. In the absence of incentives to generate more accurate forecasting, Flyvbjerg (2007a) claims that planners do not take the initiative in clarifying and mitigating risks but instead generate and exacerbate them. Whereas accurate forecasting still remains difficult to achieve, more precise cost and benefit calculation can be achieved through making actors accountable for their decisions, through impelling them to bear the risks. As the shortcomings of conventional models are seen as the outcomes of limited mechanisms for enforcing

accountability, the PPP model evolved as an alternative mode of infrastructure delivery with a better framework of accountability. As Bruzelius *et al.* (2002) argue,

[A] good decision is not only a question of better information and better methods but also institutional arrangements that promote accountability.

(Bruzelius *et al.*, 2002: 144)

There is a significant role of misleading information in investors' decision-making in large-scale infrastructure projects delivered through the traditional model. As discussed below in Section 2.4, PPP has evolved with a new framework of accountability, overcoming such weaknesses of the traditional model, and with a promise of delivering more efficient and accountable projects. However, it still remains crucial to examine the implementation of such a framework, and critics claim that the problems mentioned above still prevail within the decision-making process, affecting both public- and private-sector interests. However, this 'project decision' phase is identified as significant in terms of transparency as it assures the need of the project for public purpose. It must be mentioned here that accountability and transparency are two intertwined terms and the existing literature on decision-making focuses on accountability, rather than transparency.

## **2.3 Policy adoption on PPP**

The PPP model has been overwhelmingly accepted in the global South as an alternative tool for infrastructure delivery. However, PPP is not a well-delimited term. Weihe (2008) outlines various approaches of PPP, and Linder (1999) categorises multiple motivations to adopt PPP. The following sections provide an account of Linder's (1999) classification, Weihe's (2008) approaches and PPP as a stakeholder model. Deciding to adopt either the PPP model or the traditional model is considered one of the preliminary important phases of project development. I argue that it is even more important to demand transparency for the decision-making of this phase, as profit-oriented private-sector actors are invited into public infrastructure delivery.

### ***2.3.1 Multiple motivations to adopt Public Private Partnerships (PPPs)***

The multiple definitions and categories of PPP have been outlined by many scholars over time (Beauregard, 1998; Linder, 1999; Reuschke, 2001; Weihe, 2008). Linder's (1999) and Weihe's (2008) classifications are more universal in terms of the geographic

coverage, whereas Beauregard (1998) and Reuschke (2001) focus on the USA. Linder (1999) offers six types of motivations for adopting PPP as discussed below. These motivations are heavily influenced by neo-liberal and neo-conservative theories. Neo-liberal ideologies support a lesser role for the state on the ground that the private sector works more efficiently. Like the neo-liberal concept, the neo-conservative approach also supports a diminished role for the state, but on the grounds of decreasing the burden for the taxpayer (Linder 1999). Although this is not central to the research question of this study, it is still important to recognise such typologies in relation to one's motivation to adopt PPP beyond its accountability framework.

#### **2.3.1.1 Management reform**

In Linder's (1999) approach, partnerships are conceptualised as management reform; such management reform must change the way government functions by tapping into market discipline for efficiency gains. However, the flow of know-how should be asymmetric. The government officials should adopt the business entrepreneurship of the private-sector partner rather than vice versa.

#### **2.3.1.2 Problem conversion**

Resource scarcity is one of the main reasons influencing national governments to adopt the PPP model. Both developed and developing countries have invited the private sector into certain domains or sectors where the private sector's operation was previously restricted in order to overcome the public sector's financial shortfalls. As the public sector had been unable to fulfil its responsibility for delivering necessary infrastructure, arguably due to resource scarcity, it advertised its difficulties in terms of a business opportunity for the private sector.

#### **2.3.1.3 Moral regeneration**

This category from Linder's (1999) typology conceptualises partnership as collaboration for moral regeneration. Here, neo-liberal ideologies of private-sector actors are expected to morally regenerate government officials.

#### **2.3.1.4 Risk shifting**

As Linder (1999) argues, the risk-shifting model is about leveraging public-sector responsibility for the provision of public services to the private sector, due to the public-sector financial resource crunch. Thus, in this case, financial risk is shifted from the

public to the private sector. However, the aim is also to get private interests to sign up to partnership projects by promising potential profits for their investment. As Linder (1999) points out, risk shifting and problem conversion have parallels, but are essentially dissimilar.

#### **2.3.1.5 Restructuring public services**

Linder's model of restructuring public services through PPP more or less overlaps with the problem conversion model. The restructuring model can be conceptualised as a model that influences management reform of the public sector by incorporating the private sector's more efficient ways of working in problem areas such as infrastructure.

#### **2.3.1.6 Power sharing**

Finally, a partnership can also be formed with a motivation of power sharing between partners. Although privatisation is sometimes viewed as vertical power shifting to consumers, the particular model used by Linder (1999) is focused on the horizontal distribution of power between partners. In case of infrastructure-PPPs, public-sector partners' authoritative power over public assets will, to some extent, be shared with private-sector partners.

The following subsection discusses various approaches towards PPP and various forms of infrastructure-PPP.

### **2.3.2 *Various approaches towards PPP***

Weihe (2006) categorises studies on PPP into five categories based on their approach. These are infrastructure, development, local regeneration, policy and governance approaches. Studies with the infrastructure approach are based on the use of a PPP model for infrastructure provision. For the purpose of this study, I discuss other studies, which deal with the infrastructure approach. Hence, in the previous sections the discussion of the evolution of PPP over the traditional model mainly talks about infrastructure-PPPs. It is also called 'Private Finance Initiative' (PFI) in the United Kingdom and Canada. Theoretically, value for money is one of the most important criteria when deciding whether a project should be delivered through the PPP model instead of the traditional model. An infrastructure project is supposed to adopt a PPP model only where a better quality of service can be provided at a lower public cost.

Overall, in PPP, the government buys services from the private sector instead of buying the assets that provide the public goods (Auriol and Picard, 2009). Government assures the private sector of its profits by purchasing goods that could incur market failure. In the infrastructure-PPP approach, governments effectively pass on their investing responsibilities to the private sector with the aim of ensuring more efficient project execution. Because the asset is owned by the private sector, at least for the period of the contract, this ensures the efficient execution of the project. The PPP model is appreciated for its 'potential productive efficiency benefits' (Auriol and Picard, 2009: 82). Based on Auriol and Picard's (2009) argument, the traditional model suffers from productive inefficiency (as the public sector is inefficient in production), but the privatisation model suffers from allocative inefficiency (as the private sector will only serve populations with purchasing power). However, theoretically, both inefficiencies are taken care of in a PPP model, by the private- and public-sector partners respectively.

The infrastructure approach underpins a growing amount of literature which includes academic research, policy papers by national governments and the working papers of international development agencies (De Lathauwer, 1999; Alonso-Conde *et al.*, 2007; Aziz, 2007; Govt. of India, 2007; 3iNetwork, 2008; Akintoye, 2009; Auriol and Picard, 2009; Baindur and Kamath, 2009; Koppenjan and Enserink, 2009; Kwak *et al.*, 2009). The model has also been mainstreamed over time in developing nations. The force has been on successful adoption and implementation of the model with international development agencies playing a significant role.

### **2.3.3 *Forms of infrastructure-PPP***

The infrastructure-PPP model can potentially take various forms, depending on the range of responsibilities and risks allotted to the public- and private-sector actors. This range varies, depending on the sectors and contexts. The relevant public-sector authority takes a decision on the selection of the form of infrastructure-PPP. Success of the PPP model in delivering infrastructure depends on the selection of form of PPP. This section elaborates on forms of infrastructure-PPP and identifies this decision-making as an important phase of project development. The private sector can participate in designing, building, financing and operating public services in the PPP model. Figure 2.1 shows a range of forms of PPP ranked according to increasing level of private-sector responsibility: in the Design-Bid-Build (DBB) model, it has the least responsibility, while in the Build-Own-Operate (BOO) model it has the greatest.

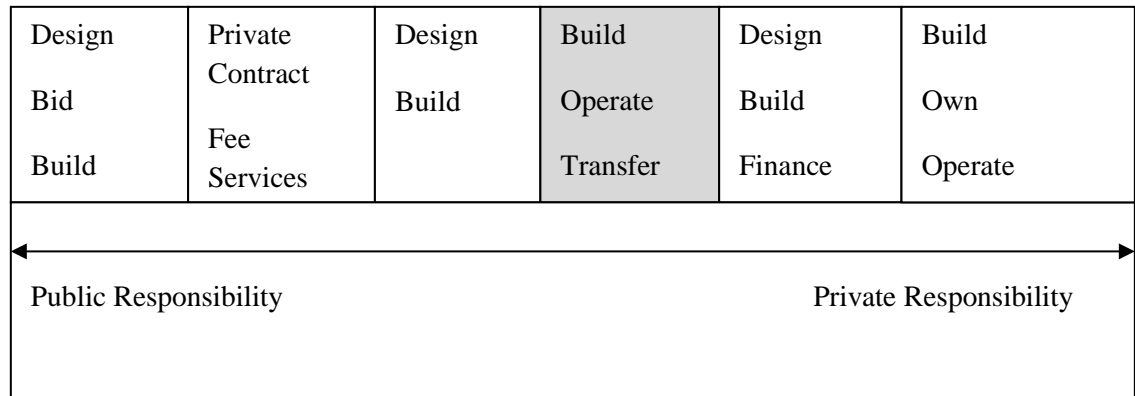


Figure 2.1: Various forms of infrastructure-PPP model ranged on a continuum between public and private responsibility

Source: United States Department of Transportation (2005) as cited by Siemiatycki (2006)

In the DBB model, the private sector's role is similar to what it would be in a traditional public-sector procurement model, except that here the construction risk stays with the private sector. By content, the BOO model requires the private sector to assume the responsibility for building, owning and operating the asset for a prolonged period of time, up to 20–25 years. Due to the unbundling or bundling capability of activities in different infrastructure sectors, different models, as described in Figure 2.1, are more or less suitable for different sectors. Even with an identical type of project, governments might choose to opt for different models depending on their political perspectives and objectives.

As I focus on the road sector, particularly on highways, this study will look into the details of the Build-Operate-Transfer (BOT) model, which is commonly used in that particular sector (Parikh and Samson, 1999). As highlighted in Figure 2.1, this model indicates a more balanced share of responsibilities between the private and public sector partners. The BOT model assigns a private-sector consortium with the duty to finance, build, operate and maintain a facility for a certain period and then transfers the asset to the public sector at the end of the contract period. The private sector generally collects the returns on its investment through user fees.

As the range of public/private responsibility varies between these models, it is obvious that the risk distribution pattern also varies between them. For instance, in the DBB model, the private-sector partner bears the lowest risk, whereas it bears the highest in the BOO model. Assigning more responsibility also means assigning more authoritative power. Hence, the risk distribution and the selection of PPP model are very much

context-dependent in reality. Moreover, the risk distribution is actually negotiated between actors depending on contextual factors and their power relationships (Chen and Hubbard, 2012). It is not always predetermined before the formation of the partnership.

These various forms of PPP model also clearly indicate activities carried out by private-sector actors in PPP models, indicating the phases of a project development. As understood from the models mentioned above, these activities are: design, bid, build, finance, operate and transfer. Hence, the phases of development would be designing (Design), partnership formation (Bid), construction (Build), financing (Finance), operating or maintenance (Operate) and transferring (Transfer). There are definitely other activities such as PPP adoption and selection of form, which are carried out by the public-sector partner, and hence are not mentioned here. However, these are also important phases of development, as understood from the studies on policy adoption of PPP.

## **2.4 Framework of accountability**

The PPP model offers a new framework of accountability, counteracting the shortcomings and weaknesses of the traditional model (Flyvbjerg *et al.*, 2003). This framework of accountability is a special characteristic of the PPP model. There are four components, namely transparency, regulatory regime, risk distribution and performance contract, as shown in Figure 2.2. The uniqueness of this framework is that it combines public- and private-sector actors' conflicting methods of maintaining accountability. The public sector maintains its accountability through transparency, consisting of disclosure of information about the use of public money. In contrast, private-sector actors maintain their accountability through market mechanisms. The PPP model innovatively combines these two methods in a way that varies in accordance with the role of each sector within the model.

The above-mentioned components of the accountability framework (also shown below in Figure 2.2) enable the project developers delivering a project with better 'value for money', delivering a better quality of infrastructure at a lower public cost. While each of them is described below in detail, it should be mentioned here that there is an enormous number of studies within the PPP literature that evaluate projects on the basis of these components in order to economically justify the adoption of PPP in relation to the conventional model (Demirag and Khadaroo, 2011; Behn and Kant, 1999; Russell *et*



*al.*, 2003; De Bettignies and Ross, 2004; Hodge, 2004; Bing *et al.*, 2005; Darvish *et al.*, 2006; Alonso-Conde *et al.*, 2007; Brandão and Saraiva, 2007; Cao and Zhang, 2008; Doloi and Raisbeck, 2008; Yuan *et al.*, 2008b).

Transparency	Regulatory regime	Performance contract	Risk distribution
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Source: Author

Figure 2.2: Institutional framework of accountability

The four components of the accountability framework are discussed below in detail.

#### **2.4.1 Transparency**

Transparency is identified as the first component of framework of accountability through which the public sector enables the process of public scrutiny. It is argued that the role of government is to represent and protect the public interest, and therefore the public has the right to verify at any time whether this is in fact what government is doing (Florini, 2007). This kind of transparency also includes two-way communication, through instruments such as stakeholder participation, from the early stages of project development, to incorporate stakeholders' feedback into design, if feasible, with the aim of delivering an efficient project. Other instruments of public participation are public hearings, release of press reports, etc. This form of transparency is discussed again in detail both in Chapters 3 and 4.

#### **2.4.2 Regulatory regime**

The regulatory regime is the second component in the framework of accountability (Flyvbjerg *et al.*, 2003). It does not only encompass the economic rules regulating the construction and operation of a project, but also includes other rules regulating the complementary investment that will be required to optimise use of the project. Moreover, if part of the project finance is to be mobilised from genuine risk capital – that is, one is required to pay compensation in the event of failure to carry out one's obligations – this can only take place depending on how the regulatory regime is set out. The need for price regulation, especially when payments are to be made from public money, should also be set out under the regulatory regime and be submitted to public scrutiny.

### **2.4.3 Performance contract**

The performance contract is the third component of framework of accountability. It involves paying the private-sector concessionaire for the performance of their product as opposed to paying them for merely carrying out the construction, as would be the case in the conventional model (Behn and Kant, 1999; Martimort and Pouyet, 2008). Under the PPP model, as the private-sector concessionaire bears both the construction and maintenance risks, they are accountable to mobilise the risk capital in the event that their product does not meet the performance standards even during project maintenance. Thus, if the product fails to meet the required standards, they will be obligated to invest their risk capital to rectify the product during the maintenance stage. In summary, this is known as a payment based on output measurement, as opposed to input measurement as followed in the conventional model. One benefit of such a performance contract is that it allows private-sector actors to be technologically innovative.

### **2.4.4 Risk distribution**

Risk distribution is the fourth component of framework of accountability. In contrast to the traditional model, in the case of PPP risks are distributed amongst the public- and private-sector actors depending on who is best able to handle them (Flyvbjerg *et al.*, 2003). This feature makes private-sector investors responsible and accountable for their decisions regarding investments and actions during project procurement, as they have to mobilise the risk capital in cases where they fail to meet their obligations. The private-sector actors' share of risks varies, depending on the form of the infrastructure-PPP model. For instance, in the BOT form, the private-sector actors bear both construction (build) and maintenance (operate) risks, while in the DBB form they bear only the construction (build) risk. In both the models, as private-sector concessionaires are responsible for the construction of the project, the construction risk lies with them. Consequently, the private-sector partner mobilises the risk capital if they fail to discharge their obligation on time or if there is a (construction) cost overrun. For this reason, it is in the interest of the private-sector partner not only to complete the project on time but also to provide a more realistic cost-benefit analysis while bidding for the project, as otherwise they might have to bear the risk capital. The political risk, however, lies with the public-sector actors, as they are in the best position to handle this.

## 2.5 Value for Money methodology

Theoretically, the underpinning understanding is that market mechanisms, as integrated in the above-mentioned framework of accountability, would automatically lead to better value for money for projects delivered through the PPP model. This means that PPP models are expected to deliver better-quality infrastructure at a lower public cost (Li *et al.*, 2001). In terms of transparency and accountability regarding the decision whether to adopt the PPP model, public-sector actors must maintain accountability by disclosing information on how the PPP model provides better value for money over the traditional model (Infrastructure Ontario, 2007).

As PPP has evolved as an alternative mode of infrastructure delivery, a Value for Money (VFM) analysis has developed as a decision-making tool concerning the adoption of PPP rather than the traditional model for the delivery of a particular project. VFM is a comparative analysis between a hypothetical public-sector comparator (PSC) and adjusted shadow bid (ASB) model (US Department of Transportation, 2011). The PSC calculates the public money involved in a project as if it were to be delivered by the traditional model. The ASB represents the project cost from the public-sector side if it were to be delivered through PPP. Both the PSC and ASB components consider the risks involved in the whole project cycle and transform them to the net present value for the purpose of comparison with a discount rate. PPP is adopted only if the ASB model involves a lesser project cost from the public-sector side than the PSC. Ontario Infrastructure runs this methodology at the three stages of project development. The final one is run after the concessionaire is selected. To operationalise transparency in the process, they recommend that the analysis must be documented and kept for public scrutiny. However, since developing nations have largely accepted and mainstreamed PPP due to financial resource scarcity, the OECD has raised the question about whether it even makes any sense to compare PSC and ASB, as there is no public money available in those countries in any case to deliver the project (Leigland and Shugart, 2006). More recent studies in the context of the global North have raised the question of why to adopt PPP if it delivers a more expensive project (Siemiatycki and Farooqi, 2012).

## 2.6 Risk management

As risk transfer plays a significant role in VFM methodology and in the decision-making process on the adoption of PPP, there is a huge amount of literature on how to achieve realistic risk assessment. Risk assessment is a complicated process, as the perception of risk varies amongst actors. The pattern of risk distribution varies across the infrastructure sector, and also with regard to geographical location (Bing *et al.*, 2005; Zhang *et al.*, 2007; Doloi and Raisbeck, 2008; Xu, 2008; Yuan *et al.*, 2008b; Yuan *et al.*, 2008a; Braadbaart *et al.*, 2009). As there are differences in opinion amongst partners on the perception of risk, Froud (2003) shows that both public- and private-sector partners negotiate their interest and investment in the project based on more realistic risk management. The differentiation between risk distribution or assessment and risk management is of considerable significance in relation to guiding potential private-sector actors in their investment decision. They make their decision based on risk distribution or assessment during partnership formation, where they calculate costs and benefits based on such assessment. However, risks are actually managed during project execution. Hence, it is important to examine the execution of the project (construction and operation stages) to understand the differences. Therefore, project construction and maintenance are important phases in the life-cycle in terms of risk management.

Realistic risk assessment is challenging but crucial to private-sector investment decisions. It is also said that practical risk assessment reduces the transaction costs in partnership formation by reducing the time and costs involved in prolonged negotiations. There are numerous studies on the risk management of PPP, especially in the transport sector. There follows an outline of a number of key studies from a range of different geographical areas.

Depending on their prior sectoral and contextual experience, the stakeholders of a PPP project, that is, public- and private-sector partners – in other words, construction companies, financial institutions and public-sector officials – have different preferences and levels of willingness in assuming risks. Studies on the identification of risk preferences and best practice in risk allocation can help in reducing transaction costs during contract negotiation. Such studies and preferences are dependent on geographical area.

For instance, Akintoye *et al.* (1998), Li *et al.* (2004) and Bing *et al.* (2005) study the risk perceptions of clients, contractors and financial institutions in the UK context. The risk allocation framework is found to be unrealistic during the early stages of PPP adoption. It becomes mature over time with actors' experience. The list of critical risks varies across geographical regions, pointing out that risk management is highly contextual. According to Ibrahim *et al.* (2006), the three most important identified risks in Nigeria are unstable government, inadequate experience and unavailability of finances. Singh and Kalidindi (2006) introduce the annuity model in India in relation to traffic risk management. The demand risk<sup>5</sup> in this model remains with the public sector, unlike the toll model, where it is transferred to the private sector. Thomas *et al.* (2003) show a divergence between stakeholders' capacities and preferences for managing risk. This explains the controversy related to risk management between actors in India and hence why fewer investors came forward for PPP models in comparison with what was anticipated (Thomas *et al.*, 2003). It also identifies eight critical risks in Indian BOT model road projects: traffic revenue risk, delay in land acquisition, demand risk, delay in financial closure, completion risk, cost overrun risk, debt servicing risk and direct political risk. Singh and Kalidindi (2009) indicate land acquisition as a critical risk in PPP road projects.

As the discussion confirms, it is hard to achieve realistic risk assessment. Hence, decision-making on risk distribution and risk management is of significant importance to the potential private-sector actors. Roumboutsos and Anagnostopoulos (2008) claim that one main reason for unrealistic risk allocation is the exclusion of end users from the equation, yet they contribute significantly towards managing risks. This point is followed up in Chapter 8 in relation to excluding affected communities from the land acquisition process, which is a critical risk.

## **2.7 Critical success factors (CSFs) in PPP**

Since the public- and private-sector actors form partnerships for infrastructure projects based on opposing motives, a large number of studies have explored factors that are critical for the successful formation of such partnerships. This pool of literature also indicates partnership formation as one of the most important phases of project

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<sup>5</sup> Demand risk is the risk that there will be demand for the project. As the demand risk lies with public sector, the public sector has to pay the return from the project using public money.

development, and the public interest is considered protected in the decision-making process by selecting the most efficient partner.

The CSFs have been classified into two broad groups: contractual arrangements or hard factors, and relational arrangements or soft factors (Tiong *et al.*, 1992; Tiong, 1996; Gupta and Narasimham, 1999; Li *et al.*, 2005; Zhang, 2005; Sundaram, 2009). Contractual arrangements (or hard factors) are those technical factors that are written into the contract between two or more parties. Examples of contractual arrangements are appropriate project identification, an attractive financial package, acceptable toll or tariff levels, reasonable risk allocation, technology transfer and so on. Relational arrangements or soft factors are relations between individuals or institutions, which are not written into the contractual agreement and cannot be measured easily, but significantly influence the success of a project. Some examples of such soft factors are open communication, trust, willingness to compromise, respect and so on. Some studies have identified transparency as open communication (Zhang, 2005; Smyth and Edkins, 2007). Several studies have explored this issue within PFI in the UK context (Edkins and Smyth, 2006; Smyth and Edkins, 2007; Zheng *et al.*, 2008). Sundaram (2009) explores it in the context of India and shows that these soft factors are difficult to measure; however, they can potentially undermine contractual arrangements (Sundaram, 2009). This is significant in relation to implementation of the framework of accountability, as undermining contractual agreements would raise questions about VFM and ultimately about project efficiency project. However, there are also positive sides to such arrangements. Bakri *et al.* (2010) recommend the use of relational contracting to overcome the lack of inter-organisational knowledge flow. They point out that the concepts of trust, knowledge sharing, cooperation and commitment are significant (Bakri *et al.*, 2010).

## **2.8 Relational factors as evident from construction management studies**

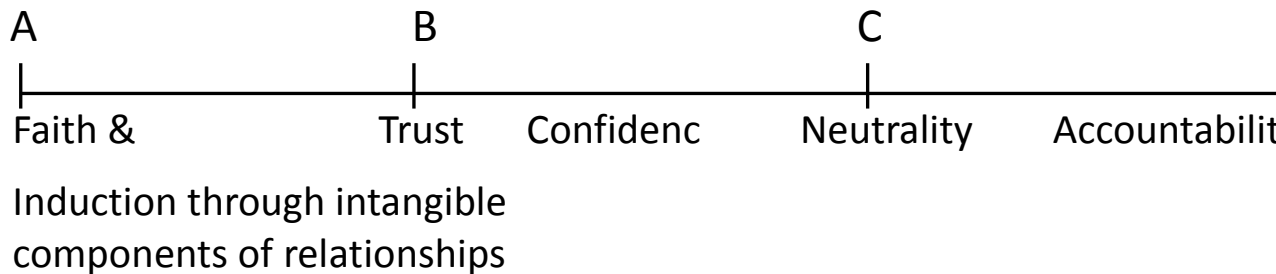
This section discusses prior studies on relational arrangements or soft factors amongst actors in the partnership, a frequently addressed topic in the field of construction management (Edkins and Smyth, 2006; Smyth and Edkins, 2007). Although PPP's framework of accountability promises better value for money for projects, studies show that soft factors like trust and power can potentially undermine the strict implementation of such framework, challenging the project VFM and the public sector's accountability towards the wider population (Edkins and Smyth, 2006). For instance, lack of trust

undermines one's need to be transparent to maintain hard-core accountability, questioning the implementation of the performance contract. Although risks are transferred to the actors best able to manage them, in reality risk management is influenced by power (Chen and Hubbard, 2012). Such evidence can only be collected from the project construction and maintenance phase while the partnership is in progress. This indicates project construction and maintenance to be an important phase of project development, especially in understanding how relational arrangements may undermine contractual arrangements and how that may impact the project VFM. The following subsections elaborate on trust and power as two forms of relational arrangements.

### **2.8.1 Trust**

Studies on CSFs have identified transparency (openness in communication) as a significant relational arrangement between actors during the project execution stage (Zhang, 2005; Smyth and Edkins, 2007). Whereas transparency as 'disclosure of information' is important for actors' accountability, openness and trust between actors is given priority in cases where actors are not willing to become involved in legal complications (Smyth and Edkins, 2007). As this is a question of relationships, openness does not exist in isolation: rather, there is interplay with other factors such as trust. However, trust is a more widely discussed topic than transparency (Edkins and Smyth, 2006; Smyth and Edkins, 2007). As shown in Figure 2.3, studies on trust amongst actors at the managerial level in PPP projects in the UK context show that there is a continuum of soft relations, from intangible soft relations to tangible determination. On this scale, accountability (which is conflated with transparency) is on the side of legalism and litigation, while trust is on the other side of the scale. There is a clear indication that transparency as 'disclosure of information' is more tangible and maintains accountability. However, trust and confidence lie at opposite ends of the scale, being more intangible, and hence, difficult to measure. Edkins and Smyth (2006) show that key actors prefer to develop trust and other soft relations at the managerial level during the course of the partnership in order to avoid becoming involved in litigation or legal disputes (Edkins and Smyth, 2006).

Figure 2.3: Relational-legal contracting performance continuum: from intangible induction to tangible determination



Source: Edkins and Smyth (2006)

According to those prior studies, trust between partners has a direct relation to the transparency of the process. This study identifies transparency as a soft factor, and hence, as ‘openness amongst actors’. Thus, the more transparent the process is, the higher the mutual trust between partners. This kind of transparency is the opposite to transparency as ‘disclosure of information’. According to those studies, the above-mentioned factors lead a project to its successful completion (Chan *et al.*, 2004; Jacobson and Choi, 2008).

Ngowi (2006) identifies trustworthiness between partners as an influential factor for the formation of construction alliances (Ngowi, 2007). Kadefors (2004) explores factors that influence the development of trust and cooperation in a client–contractor relationship. This is comparable to the public–private sector relationship within PPP. His three categories of trust are very useful in explaining cases. These are calculus-based trust, relational trust and institution-based trust. Calculus-based trust emerges when the trustor perceives that the trustee intends to perform an action that is beneficial to the trustor. Relational trust is developed between individuals who repeatedly interact over time. Institution-based trust refers to the role of the institution in shaping the conditions necessary for trust to arise (Kadefors, 2004). As Kadefors (2004) mentions, formal contractual rules outline the conditions for the development of such trust. This is reflected upon in Chapter 9 while analysing the project construction and maintenance phases.



### **2.8.2 Power in relation to risk management**

Power is another soft factor that undermines the strict implementation of framework of accountability, hence, indirectly affects transparency. This subsection mainly discusses power in relation to risk management, which is identified as an important tool in the literature. In relation to the component on risk transfer in the framework of accountability, prior studies show that risk management is in reality an outcome of a power-influenced negotiation process based upon actors' varying risk assessments and perceptions (Chen and Hubbard, 2012). Whereas risk management is actually carried out during the execution of a partnership, risk distribution is decided upon during the partnership formation stage. It is central to the value for money of a project both for public- and private-sector partners, and influences their decision-making.

An interesting recent study shows the influence of power relations on distorting risk allocation in the context of China. It shows how actors with more power were able to shift risks to the weaker parties. Here power is defined by institutional environment and resource dependency (Chen and Hubbard, 2012). Moreover, it is argued that institutional arrangements can be defined both in terms of formal and informal rules. Formal rules refer to legal contracts between partners, while informal rules refer to customs, culture or behaviour patterns (Klijn *et al.*, 1995). Both formal and informal rules decide upon power relations between actors and hence play a key role in shifting risk to the less powerful actors.

Researchers have also tried new methodologies to realistically evaluate the process. Ke *et al.* (2010) explore preferences for risk allocation in China using a fuzzy synthetic evaluation model. Whereas most of the above-mentioned studies investigate risk management through a quantitative approach, Medda (2007) uses game theory for his assessment, while focusing on the process of risk allocation as a bargaining process between partners. Such bargaining process is definitely power influenced.

It can be deduced from these studies on risk management that risk analysis framework is not fixed; it is continuously negotiated through a power-influenced process between partners. However, existing studies still fail to take into account the end users' contribution towards a partner's ability to manage the risk. This point is reflected upon in Chapter 8.

## 2.9 Land acquisition

This final section discusses land acquisition, which has been identified as a critical risk in PPP project development, especially in the global South (as is discussed below), and demands due attention. A group of scholars have used Marxist theory on capital accumulation to explain this land acquisition process. Levien (2011) describes this phenomenon of the state's use of eminent domain to effect the transferral agricultural land as 'accumulation by dispossession' (p. 933). As Levien observes, in the terms used by David Harvey, this would be called absorption of over-accumulated capital (Harvey, 1995) in the global economy; however, he himself describes this as the state's use of eminent domain to overcome the accumulation posed by insufficiently capitalist rural land markets (Levien, 2011). Although Levien's study focuses on land acquisition for a Special Economic Zone (SEZ), it still connects this issue of land acquisition for PPP projects to a wider theoretical debate on global capital accumulation.

This issue has also been addressed at a very local contextual level, as these are downside risks, and must be mitigated at a very local level, depending on the socio-economic character of the community in question. There are studies on context-dependent discussion about land acquisition for road projects in India (Thomas *et al.*, 2003; Thomas *et al.*, 2006; Raghuram *et al.*, 2009; Anant and Singh, 2010; Morris, 2011). Chettiparamb (2007) presents a model of public-private cooperation to overcome such barriers of disputed land acquisition for road-widening projects in a complex urban setting, leading to a 'win-win' situation. Her case study is based on Kerala, one of the progressive states in India (Chettiparamb, 2007). However, because it is a progressive state, it may not be possible to replicate the model in other parts of India, where the population is very differently politically motivated. These differences between regions can be connected to the debate about competition between states to deliver an investment-conducive environment (Majumdar, 2003; Anant and Singh, 2010; Mukhopadhyay, 2008 and 2011). This is important, as the cases examined here are from an underdeveloped region, and it is evident why such regions fall behind in forming successful partnerships.

The studies mentioned above do not consider the affected communities as stakeholders in the debate on land acquisition in PPP. However, I argue that the affected communities contribute significantly towards management of land acquisition risk. Moreover, it is important to consider them as their livelihood is affected by such land

acquisition (Bank, 2008). This does not only indicate land development as an important phase of PPP project development, but also shows that this phase is significant in terms of ensuring public interests are protected in the decision-making process. This section draws on two sets of studies, namely stakeholder involvement in large-scale infrastructure projects (Flyvbjerg *et al.*, 2003) and worlding practices (Roy, 2011).

### **2.9.1 Stakeholder involvement**

As mentioned in the preceding sections, proponents of PPP claim that this model delivers world-class infrastructure in developing nations. The PPP literature is mainly concerned with the successful implementation of this model at both global and local levels; it also provides a background with regard to how policymakers and core developers of PPP projects look at the issue, and the problem of project conceptualisation and materialisation. Considering Flyvbjerg *et al.* (2003) as key contributors to the literature on infrastructure development process, there is as yet little attention on how it is viewed and experienced from below by affected populations, who are neither beneficiaries nor included in the planning process, but are adversely affected by PPP projects in terms of their livelihood.

Stakeholder involvement is identified as a key instrument under the component of transparency, facilitating two-way flow of information, in the framework of accountability of PPP. As Flyvbjerg *et al.* (2003) point out, stakeholder involvement in any large-scale infrastructure project is necessary from the very beginning of the project design on pragmatic grounds, for better risk identification and management. As El-Gohary *et al.* (2006) point out, although private-sector participation is not new in the infrastructure sector, and hence, stakeholder involvement is not a very recent topic, it has gained importance in the contemporary world due to the increase in public opposition to such projects. As noted by the World Bank, the first factor holding back private investment in the infrastructure sector is:

A wider gap between the expectations of the governments and the private sector on what is reasonable and acceptable.

(Asian Business, 1996)

Stakeholder involvement has played a significant role in the planning, design, and construction phases of infrastructure projects. The flow of information in such processes is two-way, so as to incorporate public feedback into the design. Transparency and trust

must play a significant role; their lack might affect stakeholders' willingness to participate in the process (El-Gohary *et al.*, 2006). However, the scale of participation has been more intense in low-income urban communities and in very specific sectors where the community's feedback can be incorporated (Ogu, 2000). More importantly, by definition, stakeholders are perceived to have a 'positive' stake in projects. This has excluded affected communities who are not beneficiaries of the project but are affected by project development. This debate is reflected upon in Chapter 8.

Following Renn and Webler, (and as cited by) Flyvbjerg *et al.* (2003) suggest adopting a participatory and deliberative approach in including the public and stakeholders, in order to take better informed and more democratic decisions about risks. Hence, for the sake of democratic decision-making, Flyvbjerg *et al.* (2003) and El-Gohary *et al.* (2006) advocate considering affected communities as stakeholders. However, so far, the literature does not provide enough evidence on the governance of the land development process, with the exception of Chettiparamb's (2007) model on innovative forms of governance. Siemiatycki (2008) also shows that limited transparency restricts community participation, reducing meaningful community engagement in project planning. In turn, such restrictions have a negative impact on the effectiveness of the project. I argue that land acquisition, risk management and stakeholder involvement should therefore be dealt with in an interconnected way, in order to reflect upon how such a development process is viewed from below by the affected population, who are often excluded from the planning phase.

### **2.9.2 *Worlding practices***

As the PPP model is popularly understood to deliver 'world-class' infrastructure, it is worth of mentioning that there is a contemporary growing pool of literature on 'worlding practices'. This debate draws on Marxist theory on capital accumulation by the private sector. It shows the importance of looking into the land development process, where the existing urbanism is being replaced by such 'world-class' developments. Roy (2011) shows the 'world-class' development process as 'brutal and violent'. The 'worlding' practice is a very recent concept in the literature of globalisation, in contrast to the 'world city'. Whereas the debate around 'world cities' talks about the command and control nodes of the global economy, the concept of 'worlding' presents a varied range of strategies adopted at the urban scale around the world (Robinson, 2002; Roy, 2011). However, the main concern remains 'enabling

cities to enter global networks of economic exchange’ (Shatkin, 2011: 79). This literature aims to reshape the ‘actually existing urbanism’ (rooted in alternative social dynamics), that resists such modernisation and worlding practices as referred to by Shatkin (2011), who also mentions that this approach is used: ‘to reshape urban social, political, and cultural life and spatial relations to conform to an ideal of a globalised, cosmopolitan, economically integrated, and competitive city’ (p.79). I do not intend to use this literature in detail for the purpose of this study. However, a brief discussion of it acknowledges the land development phase as an important one in the PPP project development process, especially as proponents of the PPP model often claim to deliver ‘world-class’ development through this mode of delivery. In addition, these two sets of literature on stakeholder involvement and worlding practices show that the public interest must be protected in the project design and land development processes, ensuring that affected populations’ interests have been taken into consideration during decision-making.

## **2.10 Summary**

This chapter has reviewed the PPP literature and identified the major phases of project development. It argues that the public interest must be protected in decision-making throughout the project cycle, and hence, transparency must be maintained in these phases to ensure this. As identified in Sections 2.2 and 2.3, project decision, PPP adoption, selection of the form of PPP and partnership formations are important phases of development. I group these sub-phases together under the broad category of Phase I, referring to when the project is conceptualised. Depending on the chronological development process of a project, project design and land development is identified as Phase II, when the project starts taking physical shape in the form of land acquisition and the affected population interacts perceptibly with the project in terms of understanding its impact on them. I call this the first stage of project materialisation. Section 2.6 identifies project construction and maintenance as Phase III of development. As understood from the literature, this phase is important, as the pre-decided framework of accountability is actually implemented in this stage. Table 2.1 and Figure 2.4 below summarise the major phases identified from the literature review and their significance in protecting the public interest in decision-making. As understood from Section 2.3, transparency is one of the four components of framework of accountability of PPP model. However, the questions arise: what is transparency and what does it do? This

term is not very well defined in the literature. The next chapter reviews the literature on transparency in order to understand the concept.

Table 2.1: Summary of significant phases in project cycle and argument for protecting public interests

Phases	Need to meet public interests
<b>Phase I</b>  a) Project decision  b) PPP adoption  c) Selection of form of PPP  d) Partnership formation	a) The project is indeed required for the benefit of the public at public cost.  b) The PPP model must be selected over the traditional model as it offers better value for money.  c) The appropriate form of PPP must be selected.  d) Partners are chosen based on their efficiency.
<b>Phase II</b>  Project design and land development	a) The project is designed (as it affects land acquisition), keeping the concern of the affected population in mind, after consultation with them.  b) In cases where the design cannot be compromised, the affected population are allowed a smooth rehabilitation and are paid compensation to their satisfaction.
<b>Phase III</b>  Project construction and maintenance	a) The pre-decided obligations and regulatory regimes are strictly implemented.  b) The pre-decided project specification and regulatory regime are strictly implemented.

Source: Author

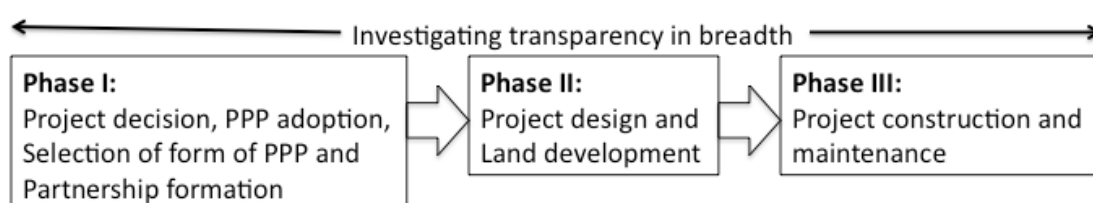


Figure 2.4: Diagram showing investigation of transparency in breadth

Source: Author

## Chapter 3. Transparency

*Because of these limitations of legalistic approaches, emphasis must be placed on creating a culture of openness, where the presumption is that the public should know about, and participate in all collective decisions. We must create a mind-set of openness, a belief that information that public officials possess is ‘owned’ by the public, and to use it for private purposes — if only an exchange of favours with a reporter — is as much a theft of public property as stealing any other form of property.*

(Stiglitz, 1999: 16)

### 3.1 Introduction

As discussed in the previous chapter, PPP’s framework identifies transparency as one of the four components of accountability (Flyvbjerg *et al.*, 2003). However, the questions arise: what is transparency, and what does it do? The vocabulary of the term ‘transparency’ is vast in the academic literature. Although it is commonly defined as ‘disclosure of information’, here transparency is explored as a wider concept, even beyond the central debate on transparency in PPPs, reaching out to the understanding of the term in a democracy and in the development planning literature. It considers transparency not as an end in itself, but as a means to achieve other ends, such as accountability. It argues that there is always a purpose in disclosing information. Such an argument for an instrumental form of transparency can be developed based on Sen’s capability approach (Gasper, 1997; Sen, 1999; Robeyns, 2005).

Also, from the table in the previous chapter, it is evident that transparency (as ‘disclosure of information’) is always operationalised with a purpose in mind. To understand transparency as a broader concept beyond the disclosure of information, it is not enough to understand how information is disclosed (mechanism of transparency), but it is also important to explore what the purposes are to disclose information, whether such purposes are met, what the barriers are to transparency, and what remedies are in place in case the purposes are not met. Hence, this chapter explores the literature on transparency from that perspective. Section 3.2 explores what transparency is; Section 3.3 discusses why transparency matters. Section 3.4 is on what the potential mechanisms are for achieving transparency, and Section 3.5 presents the potential barriers to achieving transparency. Finally, Section 3.6 summarises the chapter and develops a theoretical framework to understand the broader concept of ‘transparency’.

### **3.2 What do we mean by transparency?**

Transparency has been understood in multiple ways considered from various fundamental positions (Sen, 1999; Stiglitz, 2003; Florini, 2007). This section reviews understanding of the term from democratic, neo-liberal, and development planning perspectives. However, the basic definition in each case remains ‘disclosure of information’.

#### **3.2.1 *Democratic perspective***

Following Florini (2007), transparency is considered a component of good governance in a democracy. This transparency is generally represented as ‘disclosure of information’ about the public sector’s way of working. The purpose of such disclosure of information is to maintain public-sector accountability. According to Stiglitz (2003) and Florini (2007), the governed have the right to know what government is doing and why, also on human rights grounds. Florini even argues that information on how public money is being used does not belong to the government, but to the public. Furthermore, to explore the relation between democracy and transparency, it must be mentioned that these concepts are often discussed in association with efficiency (Rosendorff *et al.*, 2011). However, PPPs are known for posing a challenge to the public sector’s transparency mandate. On the one hand, there is a focus on transparency as a public policy issue; on the other, the public sector increasingly has a shrinking role in many domains that demand restricted transparency (Greve and Hodge, 2011). Heald and Hood (2006) offer an interesting framework to critically question the operationalisation of transparency, as discussed below in Section 3.4.1.

#### **3.2.2 *Neo-liberal perspective***

Transparency has become a buzzword during the neo-liberal era. It is primarily a prerequisite for private-sector investment, where disclosure of information about government policies helps the actor assess the risks and uncertainties associated with their investment, as a basis for their investment decision (Drabek and Payne, 2002; Stiglitz, 2003). In addition, during globalisation, transparency also became widely discussed in relation to effective cross-border policymaking. It is important for policymakers to know the local context in order to understand how and whether their policy would work. In the case of cross-border policymaking, such knowledge must be



easily accessible from a distance. The same principle is applied to cross-border investors who demand access to information on local policies in order to evaluate how their investment would work in the region. However, since this research focuses on transparency to maintain accountability, in order to ensure that the public interest is protected in decision-making, this neo-liberal perspective is not central to the study.

### ***3.2.3 Development planning perspective***

Transparency has been characterised as having an instrumental role in relation to development planning (Sen, 1999). Here, transparency is defined as a means to empower the wider population to choose the type of development they have reason to value, building on Sen's (1999) capability approach. Sen's (1999) theory on this kind of transparency predates use of PPP for 'world-class' infrastructure development, and has not been discussed in relation to PPP before. However, it is acknowledged that any connection made between these two is solely an inference of this study. I argue that it is imperative to have this discussion here, as the central question of this study is based on understanding transparency from a critical social science point of view, and infrastructure-PPP projects are discussed from the viewpoint of developing economies, where new physical infrastructure such as highways significantly enhances the nation's development. Hence, without understanding its instrumental role in development, the discussion would not only remain incomplete but would be of no real value to the actors in the global South. The same applies to the concept of corruption. Although corruption is not antonymous to transparency, increased transparency delivers an environment with reduced chances of corruption. As local actors engaged in development planning in the global South deal with corruption on a day-to-day basis, it is meaningless to talk about transparency in that environment without addressing the issue of corruption. Hence, I explore the concept of corruption partly in this chapter in relation to the instrumental role of transparency, and in detail in Chapter 4.

The capabilities approach identifies two forms of freedom: constitutional and instrumental (Sen, 1999; Robeyns, 2005). Guaranteed transparency is seen as one of the five interrelated categories of instrumental freedom. The others are political freedom, economic facilities, social opportunities and protective security. The way this theory defines transparency is:

In social interactions, individuals deal with one another on the basis of some presumption of what they are being offered and what they can

expect to get. In this sense, the society operates on some basic presumption of trust. Transparency guarantees deal with the need for openness that people can expect: the freedom to deal with one another under guarantees of disclosure and lucidity. When trust is seriously violated, the lives of many people – both direct parties and third parties – may be adversely affected by lack of openness. Transparency guarantees (including the right to disclosure) can thus be an important category of instrumental freedom. The guarantees have a clear instrumental role in preventing corruption, financial irresponsibility and underhand dealings ...

(Sen, 1999: 39–40)

This definition of transparency is addressed again in the subsection on the culture of openness below. In summary, as understood from the various definitions, transparency is fundamentally defined as ‘disclosure of information’, and demand for information varies from one position to other depending on their purposes and demand by type of actors and their role in the process. For instance, whereas information on the public sector’s way of working is demanded by the wider population in a democracy, private-sector investors in the neo-liberal society demand different types of information from the public sector, yet still insist on confidentiality for their own trade secrets. The following section elaborates on the purposes of transparency from various positions.

### **3.3 Why does transparency matter?**

In a democracy, the purposes of transparency are public-sector accountability, efficient use of resources, conforming to human rights and an informed voice in decision-making. From a neo-liberal perspective, transparency helps to achieve effective public policy. From a development planning perspective, transparency has an instrumental role in development and helps in creating a culture of openness.

#### **3.3.1 *Public-sector accountability***

In a democracy, the public sector maintains its accountability to the wider population through transparency. This is based on the principle that every citizen has a right to know how public money is used and how all aspects of collective action are carried out, even though such accountability is definitely more than mere accounting. Following Florini’s (2007) argument, it can be stated that transparency has an even bigger purpose in a democracy, which is to conform to human rights. As mentioned in the previous chapter, although transparency is theoretically restricted in PPP models because of

private-sector involvement (Flyvbjerg *et al.*, 2003), this study strongly argues for transparency because, irrespective whether the project uses BOT tolls or the annuity model, any return from the project is paid back using public money. Hence, on the ground of using public money and delivering public infrastructure, the public sector should maintain its accountability and be transparent in the PPP development process. This also empowers the wider population to demand information on PPP projects.

Schedler (1999) identifies two dimensions of accountability: answerability and enforcement. To be answerable means that public-sector officials are responsible both for informing people about and explaining their decisions. This could be viewed as a form of accounting. The same study defines ‘enforcement’ as a dimension of political accountability. Here, political accountability combines the capacities to call certain behaviour into question and eventually punish it (Schedler, 1999). Such accountability can be identified as a form of political decision-making, where the punishment in question is to remove a person or group from power. Schedler calls this an indirect form of accountability, as it does not allow the population to directly influence public decisions.

As opposed to such traditional forms of lobbying and voting, O’Donnell (1999) and Goetz and Jenkins (2001) introduce the idea of horizontal accountability, providing the wider population with the scope to participate in decision-making. O’Donnell (1999) argues that such a hybrid form of accountability (e.g. participation) is expected to empower people to influence decisions more directly. Goetz and Jenkins (2001) promote a hybrid form of accountability for greater efficiency. The concept of ‘accountability’ has evolved over time. As an extension of its understanding as ‘answerability’, it also includes ideas of assessment, blame, redress, explaining and changing behaviour (Hodge, 2008; Greve and Hodge, 2011). However, it must be noted that such tools to ensure answerability would be reactive measures of transparency and accountability. Such forms of accountability are discussed in Chapter 8 in relation to transparency and accountability in the land development process.

### **3.3.2 *Efficient use of resources***

Section 3.2.1 has already indicated the relationships between democracy, efficiency and transparency (Rosendorff *et al.*, 2011). This is also relevant in the case of development projects, especially public infrastructure projects, as public money is at stake. In this

context, efficiency can be translated as the efficient allocation of (public) resources. Since such projects use public money as a resource, the public sector is accountable to the taxpayers. However, as discussed in Chapter 2, Flyvbjerg *et al.* (2003) present evidence questioning the tools of such decision-making in the context of the traditional public-sector procurement model. Such evidence ultimately raises the question of whether transparency is operationalised in reality and whether its purposes are met.

### 3.3.3 *Informed voice in decision-making*

Florini's (2007) theory on transparency goes beyond mere accountability. She talks about the wider population's participation in decision-making with an informed voice. As Florini (2007) describes it, transparency, or rather a flow of information, is important in democracy in order to facilitate the participation of informed voices in decision-making. The purpose of having an informed voice in decision-making is to take part in or evaluate the quality of decisions in a democracy. Her definition of transparency is:

Transparency refers to the degree to which information is available to outsiders that enables them to have informed voice in decisions and/or to assess the decisions made by insiders.

(Florini, 2007: 5)

In this quote, 'insiders' refers to decision-makers and 'outsiders' to anyone who does not participate in the decision-making process but has a stake in the decision. A lack of such transparency can also be defined in terms of an asymmetry of information between the governing and the governed. Here, the purpose of transparency would be to have an informed voice in the decision-making or to be in a position to assess the quality (justice, fairness or efficiency) of the decision made. Such transparency is encouraged in deliberative democracy where more interest groups are considered in making public policy decisions (Sen, 2009). While highlighting the debate around what degree of transparency and secrecy are desirable, Florini argues that such debate reflects upon:

Fundamental issues about the nature of democracy, good governance, economic efficiency, and social justice, at levels ranging from villages to global institutions.

(Florini, 2007: 1)

Hence, Florini's way of dissecting the argument over transparency opens up her concern over the nature of democracy, good governance, economic efficiency and social justice

from a micro to a macro level, signifying that these components are not absolute and will vary between one society and another. This shows that, on the one hand, there cannot be any universal way of operationalising transparency; and on the other, any framework on how to achieve transparency should integrate the factors mentioned above to bring about transparency effectively in a real social context. While there are theories explaining the realistic possibility of achieving transparency in a society with an unequal power distribution, Florini argues that this is more than a power struggle; this struggle is about differences in fundamental values (Florini, 2007). For instance, different actors would perceive the need to meet the criteria of social (procedural) justice differently. Thus, one needs to investigate these fundamental values before deciding on the desirable degree of transparency. In this case, this difference can be investigated through the public and private sector's perception of maintaining transparency, and the affected and wider population's understanding of it. This discussion is reflected upon in Chapter 8.

#### **3.3.4 *Human rights***

In a democracy, one main role of transparency, i.e. disclosure of information, is to eventually conform to human rights. Understanding the central interest of this study, this subsection elaborates this point in the context of project development, and more specifically, land development. Development projects use physical land; land development includes land acquisition and rehabilitation of communities. Land acquisition has been identified as a critical risk during project development in the previous chapter. This phase is critical, mainly because affected communities are displaced during project construction. Such land acquisition is legitimate under the level of 'public purpose'. However, such projects do affect people's livelihoods. As per international standards on human rights, affected communities should be informed regarding upcoming projects in advance in order to minimise the negative effects of the project on their livelihoods (Bank, 2008). Moreover, communities should be either compensated or rehabilitated, even if the land is acquired for a public purpose. Here, the purpose of transparency is to assist the affected population in smooth rehabilitation. This population should be satisfied with the justice and fairness of the land development process. This point is reflected upon again in relation to a 'culture of openness'.

Developing nation states work under many constraints. Under the pressure of uncontrollable rates of urbanisation, informal housing is now a recognised phenomenon.

It is common for poor communities to squat on unused public land. While international development agencies encourage governments to compensate or rehabilitate any displaced community affected by a project, developing nation states must also make difficult decisions in the face of a moral dilemma. Such compensation can potentially encourage people to squat informally on public land, in order to be in line for compensation when that land is required for projects. This is a common phenomenon in countries with a high urbanisation rate and land is a critical resource. As a solution to this problem, international development organisations such as the World Bank have come up with a solution that provides assistance with rehabilitation for affected communities where the public sector is not liable to pay compensation. In this case, the role of information about upcoming projects would be to assist affected communities in order to effect their smooth rehabilitation, either through compensation or through practical assistance, by assuring them of the justice and fairness of the system (Cernea, 1988). Hence, following this line of argument, a bigger purpose of transparency would be to deliver a just and fair society.

### ***3.3.5 Prerequisites of investment***

From a neo-liberal perspective, transparency plays the role of a prerequisite of private-sector investment and is operationalised through the disclosure of information about government policies in order to realistically assess the risks and uncertainties of an investment (Drabek and Payne, 2002; Stiglitz, 2003). The bigger purpose of transparency here is to make realistic investment decisions. There are clearly two issues on this point: first of all, potential private-sector investors must have information about the actual risk and reward arrangement of a PPP project. Hood *et al.* (2006) refer to this as ‘contract transparency’. This has taken the form of a global movement for improving global governance. Lack of such transparency leads to unrealistic investment decisions. Secondly, potential private-sector actors must have confidence of being treated equally and must be free from the fear of patronage, which may lead to the perception of corruption (Paterson and Chaudhuri, 2007). Secrecy on the part of the public sector would discourage private-sector actors from participating in the process, with the assumption that the treatment meted out to them could be on the basis of patronage rather than their efficiency. This kind of transparency is often referred to in relation to ‘partnership formation’ in PPP literature.

### ***3.3.6 Effective public policy***

Florini (2007) points out the role of transparency in the field of public policy. Here, the key point of transparency is to evaluate the efficiency and effectiveness of policies. An honest policymaker would look for feedback on how policies are working through a two-way flow of information. As Florini points out, this form of transparency is essential in a globalised world where decisions are made by distant actors, who might not be at all familiar with the cultural setting in question. In such cases, transparency is understood by such a two-way information flow of to obtain policy feedback. Hence, transparency plays an additional role in the field of public policy during the era of globalisation. This is significant in understanding transparency in policymaking. However, this is not central to analysis of this research.

### ***3.3.7 Instrumental role***

In the literature on development planning, the purposes of the instrumental form of transparency are to reduce corruption and financial mismanagement through the disclosure of information (Sen, 1999). In fact, combating corruption has been one of the main rationales for operationalising transparency in development planning studies, also acknowledged by international development organisations such as the United Nations Development Programme (UNDP). This is discussed in detail in Chapter 4. This kind of transparency plays an instrumental role in society to build up trust and makes people feel free to deal openly with others with a guarantee of security. Sen's instrumental form of freedom empowers the population to participate in decision-making in a democracy. Hence, for obvious reasons, this form of transparency is not achieved by disclosure of information alone, but must be operationalised in interaction with other forms in order to facilitate effective participation. Effective participation enables people to scrutinise values and priorities through public discussion. Such a kind of participation is discussed in relation to deliberative democracy. Transparency, as disclosure of information, is just one of the components that ensure people's access to public information in order to facilitate such public discussion and scrutiny.

Sen's approach provides a broader framework to connect the concept of transparency with the principles of justice, indicating the creation of a just society as a bigger purpose of transparency. Effective participation is an institutional form of democracy, and can potentially be considered as a mechanism to operationalise transparency. As Sen (2009)

argues, democracy is not mere government by decision, but the capacity to enrich reasoned engagement through information available and feasibility of interactive discussion (Sen, 2009). Hence, the exclusion of stakeholders from decision-making leads to undemocratic decision-making. Sen provides room for individuals to choose their own ends based on this value. So, a democracy should be judged not only by its formal institutions, but also by the extent to which voices from across the different social strata can be heard. This is where Sen connects the concept of transparency and participation to 'justice'. Hence, justice can be considered as the bigger purpose of transparency here. As Sen (2009) argues, principles of justice are dependent on the lives and freedom of people involved. He believes that there is no 'perfectly just' society. However, one can try to achieve a 'less unjust' society by eliminating elements of injustice. This can be achieved through effective participation from as many interest groups as possible. Here, Sen's approach is adopted to investigate the instrumental role of transparency. Transparency is expected to facilitate effective participation, which would finally lead to development of a 'just' society. Moreover, it shows the wider population's expectations in terms of transparency. Sen's (1999) theory will be useful in explaining the wider population's experience in terms of transparency during the project development stage. As it raises a wider debate about democracy, it also provides an approach for thinking about the culture of openness (Gasper, 1997; Speak, 2012), which is identified as a purpose of transparency and is elaborated upon in the following section. This point contributes towards a significant part of analysis of this study in Chapters 7 and 8.

### **3.3.8 *Culture of openness***

The contemporary debate on whether technological approaches towards transparency can create a 'culture of openness' identifies the creation of such a 'culture' as an important purpose of transparency in development planning studies (Stiglitz, 2003; Relly and Sabharwal, 2009). Theoretically, the concept of a 'culture of openness' attempts to strike a balance between moral and pragmatic transparency, while also encompassing the cultural experience of transparency (or the lack of it). This phrase reflects upon the wider population's expectations from a society in terms of transparency. There is a lack of shared understanding of the term 'transparency' in different cultures (Relly and Sabharwal, 2009). As opposed to Modern Information Theory, there is a strong awareness amongst scholars that a 'culture of openness' cannot



be created by merely meeting people's demands of a right to information (Stiglitz, 2003; Relly and Sabharwal, 2009). The term 'culture of openness' is still very loosely defined in the literature; however, it is identified in a broader way than mere disclosure of information. Scholars describe it as the 'creation of a cultural and psychological climate' (Blanton, 2002: 57).

As an instrumental freedom, transparency primarily deals with the gap in a communication process that is created by people's expectations of a process and the potential of the process to deliver those expectations (Sen, 1999). The concern for the wider population's prior experience with transparency (or lack of it) and its impact on their lives should be borne in mind while developing a framework for operationalising transparency; specifically, when doing so, in terms of a 'culture of openness'. It should be understood that people who have been affected by a lack of transparency would raise their voices to demand it. Thus, it is not sufficient merely to operationalise transparency as the disclosure of information; it is necessary to improve the impact of transparency on people's livelihoods in order to improve their experience. As Heald (2006) outlines, it is important to be cautious about when to introduce transparency in order to improve the impact of transparency.

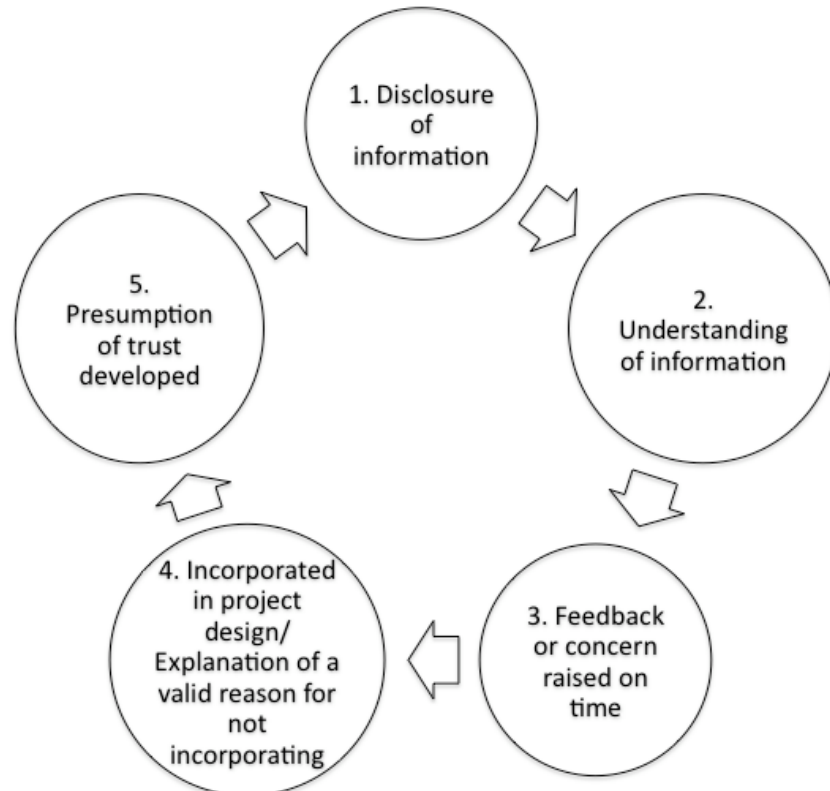


Figure 3.1: The cycle of the 'culture of openness'

Source: Author

Figure 3.1 attempts to present a graphic depiction of the culture of openness cycle, considering the case of PPP project development. This figure shows that the cycle is composed of five steps: disclosure of information, understanding of information by the recipient, their feedback, incorporation of the feedback into decisions (or explanation of a valid reason why feedback cannot be incorporated into them), and finally an improvement in people's presumption of trust in the system, based on their voice having been heard and being considered in decision-making. A 'culture of openness' may not incorporate the population's feedback into the decision. As outlined by Sen (1999), here the question is more about people's trust in the system. Hence, even though the feedback may not be so incorporated, there has to be a valid reason for such a decision and the rationale must be disclosed to the population. In cases where information is disclosed, but the system not only fails to take any action based on the feedback but also fails to show any intention to incorporate it, society's trust in the system will be violated and the cycle will cease to work. Hood and Heald (2006) raise this point while saying that it is important to understand when to introduce transparency. Transparency may still be in operation, but only theoretically, at a superficial level. Once the relevant action is taken, society will be interested in reproducing the cycle. The technical approach towards transparency addresses only the first and second parts of the cycle. It does not assure the flow of the whole cycle. A culture of openness can be created only when society has trust in the flow of the whole cycle. The third and fourth parts of the cycle ensure effective participation, while the last part of the cycle ensures the creation of a culture of openness. This section shows that there are several purposes of transparency other than maintaining public-sector accountability. This cycle is reflected upon in Chapter 8 in relation to project design and the land development phase.

### **3.4 What are the potential mechanisms for achieving transparency?**

This section discusses potential mechanisms for achieving transparency following various fundamental positions. This following discussion will also show its connection with purposes of transparency.

#### ***3.4.1 Categorisations of transparency***

Heald and Hood (2006) introduce a framework on categories of transparency depending on the mechanism to disclose information, and questioning the effectiveness of such information disclosure. Greve and Hodge (2011) have also referred to this framework in

relation to the discussion of transparency in PPPs. This framework is found extremely useful in explaining why a setting may be considered non-transparent even though mechanisms of transparency have been operationalised: this is possible when one type of transparency has been operationalised, but not others. At the same time, this does not imply that all forms of transparency have to be operationalised together. In order to investigate such questions in detail, Heald and Hood (2006) have categorised transparency into a number of groups, depending on the direction of disclosing information, the content of the information, the time of the information and the mode of disclosure. Their categories of transparency are upward versus downward transparency, inward versus outward, event versus process, nominal versus effective, and transparency in retrospect versus transparency in real time.

Their first category is upward versus downward transparency. Upward transparency is achieved when people at the bottom can see how their superiors make decisions. Downward transparency is achieved when people at the top can see how their subordinates make decisions. For instance, in a top-down planning system, downward transparency is operationalised whereas upward transparency is not.

Hood and Heald's (2006) second category is inward versus outward transparency, which means whether outsiders can see what is happening within the partnership. Florini's definition of transparency touches upon this point, where she discusses whether information about how decisions are made is available to outsiders. Here, government is considered as the organisation that makes decisions 'inside', while the wider population would be considered the outsiders seeking access to such information. The role of such transparency here should be to empower citizens (outsiders) to have a voice in decision-making.

Hood and Heald's third category is event-versus-process transparency. Event transparency occurs when information about particular events (on decision-making) is disclosed. The processes to reach the event are generally black-boxed in such cases. Process transparency is achieved when information about the processes to reach the event are also disclosed.

Their fourth category is nominal versus effective transparency. Nominal transparency can be achieved just by disclosing information, while effective transparency is achieved only when the receiver understands the information and its implications for them. Since public accountability is often maintained through publishing information in numerical

form, it is easier to operationalise nominal transparency. The gap created between nominal and effective transparency is known as transparency illusion, which Hood and Heald (2006) argue against.

Their fifth category is transparency in retrospect versus transparency in real time. Transparency in retrospect means disclosing information at a later point in time, such as bookkeeping for future consideration, while transparency in real time means disclosing information during the process so that it affects others' decisions. The democratic perspective would be concerned about transparency in real time in order to participate meaningfully in the process. Retrospective transparency is useful only when actors can be punished for failing to deliver their responsibilities.

This categorisation of transparency shows that it is potentially possible to operationalise one form of transparency in order to demonstrate that the system is transparent, but this superficial form of transparency would not fulfil its purpose in a democracy. In relation to this study, such categorisations are useful in particular contexts in order to explain why transparency has not been achieved in specific instances, in spite of facilitation through the partial disclosure of information.

#### ***3.4.2 Modern Information Theory: Freedom of Information movement***

In support of the demand for transparency, the Freedom of Information (FOI) movement empowered people to demand access to public information. This movement initiated a legal reform in many countries across the globe through mass introduction of Right to Information (RTI) Acts. Globally, many nations adopted such Acts, partially under pressure from international development organisations, but also under pressure from grass-roots organisations in both developed and developing nations. Record numbers of nations adopted such legal reforms under the pressure of bottom-up movements led by civil society, demanding their rights to access information (Roberts, 2000; Blanton, 2002; Piotrowski and Van Ryzin, 2007; Bookman and Guerrero Amparán, 2009; Relly and Sabharwal, 2009).

However, Stiglitz (2003) argues that government officials still have incentives to maintain information asymmetry. This discussion can also be referred to discuss barriers to transparency. Roberts (2000) discusses the ways through which organisations can create barriers in disclosing information, even though they are bound to disclose by

law (Roberts, 2000). His study is based on the current global effort to reinvent government through New Public Management. As Roberts (2000) concludes:

Recent Canadian experience shows that reinvention can weaken FOI [Freedom of Information] laws in three ways. First, attempts to reduce 'nonessential' spending may cause delays in handling FOI requests and weaken mechanisms for ensuring compliance. Second, governmental functions may be transferred to private contractors and not-for-profit organizations that are not required to comply with FOI laws. Third, governments' attempt to sell information and increase FOI fees may create new economic barriers to openness.

(Roberts, 2000: 308)

Hence, as outlined in the above quote, FOI laws can be weakened in three major ways: delay in handling requests and lack of implementation; transfer of jobs to private-sector organisations who are not bound to comply with FOI; and attempts by governments to sell information instead of disclosing it at no extra cost. These issues can potentially raise questions about the implementation of RTI Acts. Rules and regulations for transparency have been tightened through RTI Acts; actors with incentives to hide information have found loopholes in the system. Whereas RTI Acts are identified as a mechanism to operationalise transparency, incentives to hide information are identified as barriers to transparency. It is crucial to understand this, as theoretically the system is expected to have improved transparency, whereas in reality it is highly restricted. In such a setting, empirical evidences in support of disclosure of information might not confirm actual transparency in reality.

This issue of strict implementation of RTI Acts would need particular attention in the case of joint public-private-sector collaborations, as the complete disclosure of information could be more fundamentally questioned in the light of the private sector's demand for confidentiality, as highlighted by Siemiatycki (2007) for the case of PPPs. Figure 3.2 graphically presents the flow of logic for restricted transparency.

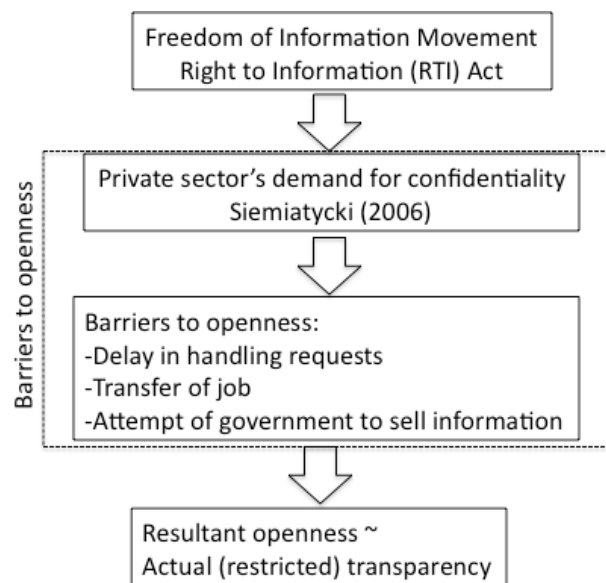


Figure 3.2: Logic diagram for restricted transparency

Source: Author

On the one hand, the adoption of RTI Acts empowered people to demand information; on the other, technological advancement facilitated people's easy access to information. As a result, public-sector actors were required to proactively share their information with the public on their websites to showcase themselves as transparent; at the same time, citizens could gain easier access to information on the public sector's way of working so the latter's accountability could be improved. International development organisations such as UNDP played an active role in pressurising governments to share their information on websites in order to be more transparent and accountable to the general public.<sup>6</sup> It is said that through such frequent proactive disclosure of information, the public sector would be subject to continuous scrutiny and public-sector officials would refrain from financial mismanagement through the fear of exposure. Over time, such regular processes of disclosure and scrutiny would be expected to give rise to an open society, which Florini would call a transparent society (Florini, 2007).

Critiques of Modern Information Theory have raised the issue of whether such technological approach towards transparency supported by RTI Acts can also lead to the creation of culture of openness, as discussed in the previous section. As the discussion shows, Modern Information Theory ensures frequent proactive disclosure of information. However, a 'culture of openness' is created through improved perception

<sup>6</sup> [http://pppue.undp.2margraf.com/en/08\\_2.htm](http://pppue.undp.2margraf.com/en/08_2.htm) accessed 1 June 2013

of trust of the people on the government beyond mere disclosure of information. Hence, Modern Information Theory does not automatically create a ‘culture of openness’.

### **3.4.3 Stakeholder involvement**

As discussed in the previous chapter, stakeholder involvement is a tool for two-way flow of information under transparency, which is a component of PPP’s framework of accountability. This form of communication helps the project developers to incorporate feedback from stakeholders into the project design. This point is reiterated here, as it is also a mechanism to operationalise transparency. As identified by Flyvbjerg *et al.* (2003), stakeholder involvement plays an important role in facilitating a two-way flow of information between stakeholders in any development project. Such a tool not only delivers a more effective project, but information about the upcoming development project and its benefits to society generates support for it. In cases where stakeholders are consulted about upcoming projects in advance, they become more cooperative during project development. However, here the role of information is not restricted merely to inform, but to incorporate stakeholders’ feedback into the project design (Flyvbjerg *et al.*, 2003). It can be argued that where local communities are considered stakeholders of the project and consulted during the project design stage, they would be cooperative during project development. This tool provides a window for the stakeholders to express their concerns during project development and allow project developers to incorporate these into the design. However, it is acknowledged that feedback cannot always be incorporated in this way; explaining why not may also suffice, as long as affected communities consider that reason valid and have their consent in decision-making. I argue that stakeholder involvement, as a tool, has the potential to create a culture of openness through open decision-making and informed consent. Hence, here I explicitly connect the PPP model with Sen’s (1999) instrumental form of transparency and culture of openness through the string of ‘stakeholder involvement’ as a tool. However, it is always debatable who are considered as legitimate stakeholders, at what stage this tool must be operationalised and with what purpose.

## **3.5 What are the potential barriers to achieve transparency?**

However, just as there is a widespread debate on improving transparency, there are also potential reasons for actors to restrict transparency. There follows a discussion of the

agency problem, and soft relations such as trust and power, which are potential barriers to transparency.

### **3.5.1 *The agency problem***

The agency problem offers an explanation for the asymmetry of information between the principal and agent from an economist's point of view (Stiglitz, 2002; Florini, 2007b). In a democracy, the wider population delegates tasks to public-sector officials by means of the electoral process. Here, the wider population has the role of the principal, while the public-sector officials are their agents, carrying out tasks on behalf of the wider population as delegated by them. Those agencies are politically accountable to the wider population. When principals delegate tasks to agencies, they are interested in closely monitoring the agency's performance; however, this raises difficulties, due to constraints of time and money. As time and money can be translated into purely fiscal terms, there is an economic explanation of this phenomenon. Agencies will have incentives for hiding information on how they are carrying out tasks if it saves them energy and money, and as long as the outcome remains the same and they are not punished. This issue has also been discussed widely under the topic of corporate governance (Patel *et al.*, 2002; Chiang and Chia, 2005).

Bordignon and Minelli (2001) explain the agency problem from a political economy point of view. This highlights how rules of allocation and redistribution in the public sector are often less contingent on the available information (Bordignon and Minelli, 2001). The disclosure of information and citizens' participation in decision-making can potentially reduce such agency problems. As Florini describes it, transparency has become an essential component of democracy as it empowers citizens to participate in and meaningfully influence the policy that affects their lives. Based on this approach, it is clear that disclosure of information must be followed up by (and with an intention of) citizen consultation and the incorporation of their concerns (a process generally termed as meaningful participation) in shaping the policy. Florini's explanation of the agency problem and role of transparency in reducing the agency problem also clarifies the incentives that may motivate public-sector officials, and any other agents, not to operationalise transparency and to create information asymmetry (Bordignon and Minelli, 2001; Patel *et al.*, 2002; Bebachuk and Fried, 2003; Chiang and Chia, 2005; Prat, 2005). Heald and Hood's (2006) category on event-versus-process transparency can potentially explain the agency problem.



### **3.5.2 Trust and power**

As already elaborated in Section 2.5, trust and power are two major identified relational factors that can potentially undermine transparency and accountability. Whereas ‘disclosure of information’ is important for actors’ accountability and avoiding litigation, openness between actors and trust is given priority in cases where actors are not willing to become involved in legal complications (Smyth and Edkins, 2007). However, openness works in interplay with other relations such as trust. Trust has been more widely discussed than transparency (Edkins and Smyth, 2006; Smyth and Edkins, 2007). Edkins and Smyth (2006) show that there is a continuum from intangible soft relations to tangible determination at the managerial level in PPP projects in the UK context. On this scale, accountability is on the side of legalism and litigation, while trust is on the other side. As the nature of transparency, as discussed during the partnership formation stage, is to improve accountability, there is a clear indication that such transparency is more tangible and is maintained in order to justify a legal position. Such transparency is easily measurable through legal contracts. However, trust and confidence lie at the opposite end of the scale, being more intangible, and hence, difficult to measure. Key actors prefer to develop trust and other soft relations at the managerial level during partnership execution in order to avoid becoming involved in litigation and legal disputes.

Besides exploring transparency as an essential factor, it is also measured in comparison to other relations such as trust (Chan *et al.*, 2004). Chan *et al.* (2004) show that trust between partners has a direct relation to the transparency of the process. Thus, the more transparent the process, the higher the mutual trust between partners. So, transparency can serve various purposes, such as access to information, effective communication, open decision-making, and expression of partners’ expectations. These are also considered under the critical success factors (CSFs) for the successful completion of the project (Chan *et al.*, 2004; Jacobson and Choi, 2008).

## **3.6 Summary: a theoretical framework on transparency**

The basic definition of transparency is ‘disclosure of information’. There are three stages to operationalise such transparency: clear rules/rationales for decision-making, documentation of such rules, and accessibility of such documents by the public at any point in time for scrutiny. Hence, in terms of ‘disclosure of information’, transparency

can be completely achieved only by completing these three steps. There are legal reforms in place to improve such accessibility; however, there are also very clear incentives for public-sector actors to create barriers to transparency. In relation to this, this chapter discussed both the Freedom of Information (FOI) movement and the Right to Information (RTI) Acts, and barriers to them. As disclosing information involves time and money, the agency problem provides a useful economic theory on barriers to transparency. In addition, there are soft relations such as trust and power that also override actors' need to operationalise transparency and hence can be considered as barriers. Finally, the result is the actual transparency achieved. As understood from the literature, there are always purposes for operationalising transparency. For instance, combating corruption is one of the main purposes of transparency. Depending on how it is operationalised, especially as understood from Heald and Hood's (2006) framework, the purposes of transparency are either achieved or not. Figure 3.3, on the following page, graphically presents the framework. The following chapter will explore the issue of transparency in PPPs, especially as transparency is represented in practice to understand the stated purposes.

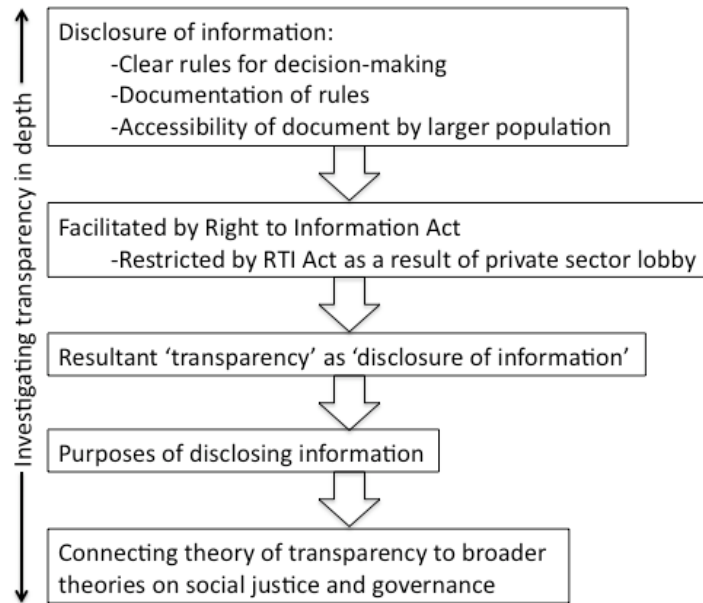


Figure 3.3: Conceptual framework on investigating transparency in depth in PPP

Source: Author

## **Chapter 4. A Conceptual Framework for Transparency in PPP**

### **4.1 Introduction**

Developing the previous two literature review chapters on Public Private Partnerships (PPPs) and transparency, this chapter aims to develop a nested theoretical framework for the investigation of transparency in the overall PPP project development process. The central argument is that public interests must be protected in the decision-making process throughout the project cycle. Also, transparency must be operationalised in terms of disclosing information on how the public interest has been protected within the decision-making process. The public sector must make that information accessible to the public for scrutiny at any point in time. With such a rationale in mind, this chapter develops a theoretical framework to investigate the transparency of the PPP project development process, taking two parameters into consideration, built over the existing literature. Firstly, it investigates transparency ‘in depth’, exploring the term beyond its common understanding of mere ‘disclosure of information’, as outlined in the framework at the end of Chapter 3. Secondly, it investigates the term ‘in breadth’, looking at the issue within the whole project cycle, as opposed to only during partnership formation, as outlined at the end of Chapter 2. In the process of developing the framework, this chapter first examines transparency as a component of the framework of accountability, transparency as discussed in the PPP literature so far, and the representation of transparency in practice.

### **4.2 Institutional framework of accountability in PPP**

The common understanding of transparency in PPP is as a component of the institutional framework of accountability. As discussed in Chapters 2 and 3, PPP offers a new framework of accountability, counteracting the shortcomings and weaknesses of the traditional public-sector procurement model (Flyvbjerg *et al.*, 2003). There are four components, namely transparency, regulatory regime, risk distribution, and performance contract, as shown in Figure 4.1. The uniqueness of this framework is that it combines public- and private-sector actors’ conflicting methods of maintaining accountability. The public-sector actors maintain their accountability through transparency, consisting of disclosure of information about the use of public money. In contrast, private-sector actors maintain their accountability through market mechanisms. The PPP model

innovatively combines these two methods, in a way that varies according to the role of each sector in the model.

The above-mentioned components of accountability lead to better ‘value for money’ of projects, delivering a better quality of infrastructure at a lower public cost. There is an enormous number of studies in the PPP literature that evaluate projects on the basis of these components in order to economically justify the adoption of PPP as opposed to the conventional model (Demirag and Khadaroo; Behn and Kant, 1999; Russell *et al.*, 2003; De Bettignies and Ross, 2004; Hodge, 2004; Bing *et al.*, 2005; Darvish *et al.*, 2006; Alonso-Conde *et al.*, 2007; Brandão and Saraiva, 2007; Cao and Zhang, 2008; Doloi and Raisbeck, 2008; Yuan *et al.*, 2008b).

Transparency	Regulatory regime	Performance contract	Risk distribution
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Figure 4.1: Institutional framework of accountability

Source: Author

PPP’s new framework of accountability empowers public-sector actors delivering a better quality of infrastructure at a lower cost. Transparency is the first component within the framework; the next section discusses transparency in general, followed by a section on transparency in PPP.

### 4.3 Transparency

Transparency is one of the components of accountability in the public sector, through the enabling of public scrutiny. The role of government is to represent and protect the public interest and therefore the public has the right to verify at any time whether this is in fact what government is doing. As Flyvbjerg *et al.* (2003) define it,

*The transparency requirements means, inter alia that all documents and other information prepared by the government and its agencies should be made available to the public.*

(Flyvbjerg *et al.*, 2003:111)

This quote clearly indicates that there are three criteria for the operationalisation of transparency:

- The public sector must make decisions keeping the public interest in mind;
- It must record their decisions and basis of decision-making in documents, and

- Such documents must be accessible by the wider population for scrutiny at any point in time.

This way of outlining the criteria for operationalising transparency is also supported by the overall discussion in Chapter 2 on the importance of decision-making in the various phases of project development. Since the public sector is bound to ensure that the public interest has been protected in those decisions, it is important for them to be transparent to the public. This particular part of the literature, on large-scale infrastructure projects, also embraces transparency in the form of both one- and two-way communication and participation with the wider population through stakeholder involvement, public hearings, release of press reports, etc. Such a two-way flow of information, including stakeholder involvement, is encouraged from the early stage of project design in order to deliver an effective project with stakeholders' consent and to avoid any future resistance to project development. The following section discusses the existing academic literature on transparency in PPP.

#### 4.4 Transparency in PPP

Following Flyvbjerg *et al.* (2003), certain documents should be made available to public as they are produced during a project development and should be subject to independent and public peer review on major issues. Table 4.1 is a summary of such documents.

Table 4.1: Documents requiring disclosure in order to maintain transparency

Sl no.	Name of document	Description
1	Basic policy document	This is the initial and initiating document in which government identifies all issues associated with the proposed project and sets out a strategy for how to deal with them, especially the process for formulating performance specification and involvement of the public.

<b>Sl no.</b>	<b>Name of document</b>	<b>Description</b>
2	Draft performance specification report	<p>This document is to be commissioned by government and prepared by the consultants, and identify all issues related to the formulation of performance specification and produce a first proposal of how to set the performance standard.</p> <ul style="list-style-type: none"> <li>a) Service and infrastructure to be considered</li> <li>b) Technical specification from a performance point of view</li> <li>c) Location of additional, associated infrastructure</li> <li>d) Financial and economic requirements</li> <li>e) Environmental requirements</li> <li>f) Safety requirements</li> <li>g) Other requirements</li> </ul>
3	Pre-feasibility study	<p>This is a document commissioned by government, to be prepared by consultants, and is close to a full-scale feasibility report, excluding details of alternative designs.</p>
4	Consultation document 1 (performance specification)	<p>This document justifies, to begin with, why government considers that preparation should proceed, and should be based on the findings of the pre-feasibility study. The document covers the following themes:</p> <ul style="list-style-type: none"> <li>a) Preliminary identification of a few basic alternatives;</li> <li>b) Preliminary design of these alternatives, including cost estimate;</li> <li>c) Market study (travel document forecast);</li> <li>d) Preliminary identification of supplementary investments required;</li> <li>e) Preliminary economic and financial viability evaluations;</li> <li>f) Preliminary risk analysis using the MLD principle.</li> </ul>
5	Consultation document 2 (risk management, operation, regulation, subsidiary financing)	<p>This document makes proposals for risk management, future operations of a possible project, the level of non-guaranteed financing required, the type of economic regulatory regime, estimates of additional cost and proposals for financing.</p>

Sl no.	Name of document	Description
6	Final performance specification document	These are documents to be submitted to the regulatory authority in order to obtain preliminary clearance, and where possible, preliminary permits to build the proposed infrastructure if a decision is made in favour of the project.
7	Decision document	This document would contain major recommendations on all major policy issues and would thus identify all essential conditions with which a future operator would have to comply.
8	Information document	This would be final the major document to be prepared by the government and would deal with issues either after negotiation or with financial closure.

#### ***4.4.1 Does the PPP model offer a more transparent and accountable planning process than the traditional model?***

Transparency is a contested concept in PPP, where public- and private-sector actors have conflicting ways of maintaining their accountability. On the one hand, the private sector demands confidentiality for their trade secrets (Siemiatycki, 2006). On the other, academics advocate a two-way flow of information through stakeholder involvement from the early stage of project design. Proponents of PPP claim that it offers a more transparent and accountable planning process than the traditional model (Grimsey and Lewis, 2004). Scholars have largely investigated whether this is in fact the case (Siemiatycki, 2007). They have shown how improved transparency would have delivered a more efficient project. In practice, transparency has been discussed in PPPs in relation to partnership formation. This is of significant importance, especially in developing nations, for combating corruption, as infrastructure projects are capital-intensive and profit-oriented private-sector actors are invited into public infrastructure delivery. The following subsections elaborate on two aspects of transparency in PPP often discussed in practice: transparency of partnership formation, and corruption (Glaister, 1999; Klijn and Teisman, 2000; Bovaird, 2004; Jamali, 2004; Flinders, 2005; Hodge and Greve, 2005; Hood *et al.*, 2006; Hodge and Greve, 2007).



#### **4.4.2 Transparency of partnership formation**

Transparency has been largely discussed in relation to partnership formation in PPP both in academia and in practice. Because infrastructure-PPPs deliver public infrastructure and public money is at stake, the public-sector partner is accountable to wider population. As this mode of infrastructure delivery involves private-sector partners with profit-oriented interests in public infrastructure delivery, it is essential to ensure that private-sector partners are selected on grounds of efficiency and not personal gain. During partnership formation, the role of transparency is to maintain the public-sector's accountability towards the wider population by providing information on why a particular private-sector partner was selected and by whom (3iNetwork, 2008). This form of transparency also improves people's trust in the government by establishing that the private-sector partner was not chosen for private gain. Hence, one main purpose of transparency during partnership formation is to combat corruption, and this is intensely discussed in the field of development planning (Bovaird, 2004; UNDP<sup>1</sup>). International development agencies play an important role in training potential partners on how to adopt tools to operationalise this kind of transparency.<sup>7</sup> In practice, the term 'transparency' has been often associated with 'transparent bidding'. Broadly speaking, any PPP project is considered to be transparent if it has had a transparent bidding process (3iNetwork, 2008). Policy papers on transparency in PPP also use transparency in this phase.<sup>8</sup>

However, transparency became contested in PPPs as private-sector actors demanded confidentiality of their trade secrets (Siemiatycki, 2007b, 2009). Hence, there is a constant struggle between citizens' demands for information and the private sector's demand for confidentiality (Roach, 2011).

#### **4.4.3 Corruption**

One main purpose of transparency has been to combat corruption, mainly in the context of developing nations, as outlined by international development organisations such as the United Nations Development Programme (UNDP). As PPPs invite profit-seeking private-sector actors into public infrastructure delivery, which involves public money and investment, and is prone to corruption due to its capital-intensive nature, one main

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<sup>7</sup> [http://pppue.undp.2margraf.com/en/08\\_2.htm](http://pppue.undp.2margraf.com/en/08_2.htm) accessed 1 June 2013

<sup>8</sup> [http://pppue.undp.2margraf.com/en/08\\_2.htm](http://pppue.undp.2margraf.com/en/08_2.htm) accessed 1 June 2013

public interest in partnership formation is to ensure that partners are chosen based on their efficiency. Transparency in the public sector is about providing information on the efficient and just allocation of resources, and not using public resources to serve private interests (Tanzi, 2000). A lack of such transparency leaves room for the misuse of public resources for private gain and can therefore lead to corruption. Corruption does not have any universal definition; it is defined culturally. An organisation called Transparency International (TI) issues a 'Corruption Perception Index' (CPI) on the basis of each government's openness about its actions to the population. TI defines corruption as 'misuse of invested power for personal gain' (Cockcroft, 2012). The CPI index can be considered as a negative measure of transparency. India was 94th amongst 176 nations in the list in 2012.

Prior research shows that issues of corruption in the construction industry have been associated with the centralisation of power into the hands of a few government officials, and the lack of accessibility to and availability of public-sector officials who are responsible for providing information, combined with their attitudes towards citizens (Tanzi, 2000; Caiden *et al.*, 2001; Caiden, 2007). The construction industry in the transport sector has been identified as one of the more corrupt sectors in India, partly due to its capital-intensive nature (Mauro, 1995; Treisman, 2000; Paterson and Chaudhuri, 2007; Kenny, 2009). Thus, decentralising power and promoting e-governance, where information is available on websites maintained by government departments, has addressed such issues of corruption and no personal interaction is necessary. Moreover, as a part of the movement, the legal framework has been boosted with the Right to Information (RTI) Act, which empowers all citizens with the legal right to access information regarding public accounts, and imposes timelines within which queries must be satisfied. However, it provides room for maintaining the confidentiality of sensitive data and exempts authorities from the requirement to disclose all information (*Right to Information Act* (India), 2006). The introduction of such legal reform is strongly believed to contribute towards the creation of a transparent society, as coined by Florini (2007), and reduce corruption.

#### **4.4.4 Transparency of PPP contracts**

Studies in the UK, Europe and Australian contexts have also expressed their concern about the transparency of PPP/PFI contracts. Greve and Hodge (2011) speak for both event and process transparency of the contract institution in PPPs. This particular study

picked up cases both from Europe and Australia. Hood *et al.* (2006) advocate the transparency of PFI contracts, especially in relation to understand the implication of risk and rewards in the context of the UK. Greve and Hodge (2011) emphasise transparency during the project conceptualisation phase as they acknowledge that it is difficult to change the arrangement of partnership once the contract is signed between two parties. Hood *et al.* (2006) call PFI contracts more rhetoric than reality. I analyse this for PPP contracts in Chapter 9, which also reflects upon the implications for the public sector's accountability towards the wider population, especially taxpayers.

#### **4.5 Representation of transparency in PPPs**

Both international organisations and nation and state governments have expressed their concern to improve transparency in PPPs, in order to improve the efficiency and fairness of the infrastructure delivery process through PPP. This section outlines how transparency is represented in PPP by international, national and local government. As international organisations have formulated their guidelines to improve the transparency of the process as a component of good governance, policymakers in India have also expressed their willingness to do so, being influenced by pressure from civil societies. They are encouraged to publish clear guidance on how local governments may potentially improve transparency in PPPs. The following is a brief description of the representation of transparency. These authorities have certain purposes in mind behind formulating these guidelines on how to operationalise transparency. In this study, I consider those authorities' purposes as the 'stated purpose' in the framework.

##### **4.5.1 UNDP guidelines**

The United Nations Development Programme (UNDP) formulates guidelines to improve transparency in PPPs. Their definition of transparency is:

Transparency is about including, not excluding, all stakeholders; it is also about building awareness. Stakeholders might include: consumers, voters, labour organisations, bidders and the municipality itself. These individuals and groups need proper information about potential impacts, policies, partnership objectives and how partners will be chosen and contracted.

(United Nations Development Programme, online)<sup>9</sup>

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<sup>9</sup> [http://pppue.undp.2margraf.com/en/08\\_2.htm](http://pppue.undp.2margraf.com/en/08_2.htm) accessed 1 June 2013

This quote defines transparency as the inclusion of all stakeholders, which defines the term beyond mere ‘disclosure of information’. Besides bidders and municipalities, they identify consumers and voters as stakeholders, and demand their access to information about potential impacts and policies. In relation to infrastructure-PPPs, this can be explained in terms of the wider population (both consumers of public infrastructure and voters) demanding access to information about the expected benefits of a proposed project (that is, the need for the project) and infrastructure delivery-related policies. Hence, the stated purpose of operationalising transparency would include maintaining accountability towards the wider population about project decisions and policy adoption. Needless to say, the transparency of the selection of partners is one of the main points of discussion. UNDP also identifies combating corruption as a prime purpose of improving transparency through being open about government decision-making. In their definition, one form of corruption is ‘contracts being given to private firms who may not be suited for the job at the expense of other bidders and at the expense of the public, especially the poor’.<sup>10</sup> This leads to considering combating corruption as one of the stated purposes to operationalise transparency during partnership formation.

UNDP formulates guidelines on what makes a PPP transparent. In relation to this, they outline a checklist for local municipalities to be transparent in their activities as follows:

Municipalities should establish rules that help them to be transparent in their activities. The process and any changes should be made public and should be as open as possible; this should be the case continuously throughout the project cycle. These rules to aid transparency should be appropriate to the local context and the way actors work in the municipality. For example, when private sector actors and individuals are bidding they must all:

- Have access to the same information about the project;
- Comply with the same minimum requirements;
- Be prohibited from involvement with those awarding the contract;
- Be prohibited from collusion with other bidders; and
- Be bound to their proposal and not be able to change it after the contract is awarded.

(United Nations Development Programme, online)<sup>11</sup>

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<sup>10</sup> [http://pppue.undp.2margraf.com/en/08\\_2.htm](http://pppue.undp.2margraf.com/en/08_2.htm) accessed 1 June 2013

<sup>11</sup> [http://pppue.undp.2margraf.com/en/08\\_2.htm](http://pppue.undp.2margraf.com/en/08_2.htm) accessed 1 June 2013

The above-mentioned points provide very strict guidelines on how transparency can be operationalised. They encourage municipalities – or as a matter of fact, any other relevant public-sector authority – to have clear rules and regulations for their activity, publish them on their websites for people’s easy access, and make any amendments as soon as possible. Those rules should be contextually appropriate and the process should be carried out throughout the project cycle. Here, the stated purpose of transparency is to inform stakeholders about the public sector’s way of working. In relation to infrastructure-PPP, it can be explained as informing potential private-sector partners about the way of working with the public-sector authority. In addition to what has already been discussed previously regarding partnership formation, it adds three new important criteria: private-sector partners must be prohibited from involvement with those awarding the contract, and from collusion with other bidders, and be bound to their proposal and not be able to change it after the contract is awarded. While the first two criteria must be kept in mind, especially during partnership formation, the third point must be maintained throughout the project life-cycle. In this way, these rules also advocate for transparency throughout the cycle.

UNDP also provides guidelines on accountability. By their definition, ‘accountability is responsibility for performance and results; it involves holding the partners (private or municipal) responsible for results against agreed upon performance standards’.<sup>6</sup> Local municipalities should carry out the following acts in order to develop an accountable PPP arrangement:

- Define the responsibilities of each partner;
- Ensure clarity of responsibilities even as roles develop; and
- Monitor the achievement of goals over the duration of the PPP.

(United Nations Development Programme, online)<sup>12</sup>

Although transparency and accountability are not the same, these two terms are conflated. Keeping that conflation in mind, I argue that information about the accountability arrangements within PPP, as described above, should be available to the public and the stakeholders to ensure the framework of accountability is strictly implemented. Here the stated purpose of transparency is, firstly, to inform potential private-sector partners about the performance contract, with the responsibilities of each actor clearly stated, and secondly, to ensure that the performance contract is being strictly implemented through monitoring.

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<sup>12</sup> [http://pppue.undp.2margraf.com/en/08\\_2.htm](http://pppue.undp.2margraf.com/en/08_2.htm) accessed 1 June 2013

#### **4.5.2 United Nations Economic and Social Council (ECOSOC)**

As the United Nations Economic and Social Council (ECOSOC) (2005) states:

The ultimate beneficiaries of transparency are the citizens. They should no longer be seen as ‘outside’ the project and should have the opportunity to be consulted and informed at every stage.

(ECOSOC, 2005, online)<sup>13</sup>

Like UNDP, ECOSOC also defines transparency in terms of inclusion of all stakeholders, giving the term ‘transparency’ its depth, beyond ‘disclosure of information’. Moreover, it advocates for the wider population to be consulted at every stage. It recognises that project transparency is critical in relation to PPP, especially in relation to critical infrastructure and services. According to their guidelines, best practices on transparency with PPP should provide the public easy online interactive access to the PPP agreement, with every amendment included and with powerful search and cross-linked navigation. Their guidelines are supported by the Freedom to Information movement and use of technological advancement. Hence, these guidelines by ECOSOC also consider proactively disclosing information on the public-sector body’s website as a criterion to meet the guidelines of transparency. Here, the stated purpose of transparency is to incorporate the wider population’s feedback into decision-making.

#### **4.5.3 Policymakers in India**

A media report published in 2013 shows that the top policymakers in India have expressed their willingness to improve transparency in PPPs as this has become one of the prime models to deliver infrastructure in India. The report shows that there is a possibility of a US\$1 trillion investment in the infrastructure sector during the twelfth Five Year Plan (2012–17). Such willingness is influenced by demand for transparency by the civil societies, for example, Anna Hazare’s fight for corruption.<sup>14</sup> Hence, they are in favour of ‘complete transparency in awarding projects to eliminate possibility of favouritism or crony capitalism’.<sup>15</sup> Moreover, the then Prime Minister himself, Manmohan Singh, called for demonstrating a ‘transparent and fair approach’ towards

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<sup>13</sup> <http://www.pponline.com/global-transparency-agenda/> accessed 1 June 2013

<sup>14</sup> <http://www.civilserviceindia.com/subject/Essay/anna-hazare-against-corruption.html> accessed 1 June 2013

<sup>15</sup> <http://www.firstpost.com/politics/let-their-be-transparency-in-ppp-projects-says-pm-81935.html> accessed 1 June 2013

the ‘award, construction and operation’ of highway projects.<sup>16</sup> This requires greater breadth of transparency. Here, the stated purposes of transparency are combating corruption and creating a ‘fair’ society.

In another instance, the central government mandated public-sector authorities to proactively disclose information related to public–private partnerships projects on their website in order to improve transparency.<sup>17</sup> This mandate on voluntary disclosure is an improvement on the government’s own position from two years previously. As the report mentions:

Guidelines issued by the department of personnel and training (DoPT) said that details, including setting up of special purpose vehicle, concession agreements, process of selection of private party, information on fees, toll or other revenue collected under authorization from the government should be made public voluntarily. The guidelines come at a time when all core infrastructure projects, including highways, ports, airports, metros, Delhi–Mumbai Industrial Corridor (DIMC), are being built under the PPP model. The department has accepted the recommendations of a government task force set up in May, 2011.

*(Times of India, April 2013, online)*<sup>17</sup>

As shown in the above quote, the government acknowledges the need to improve transparency on the grounds that PPP projects involve public money, and the public sector should be accountable for its use of taxpayers’ money. Although RTI is in place to meet such accountability requirements, in the government’s opinion such proactive disclosure will bring down the cost involved in RTI applications. Hence, this will improve people’s ease of accessing information. Here, the stated purpose of proactive transparency is not only to maintain public-sector accountability, but also to bring down the RTI costs. Moreover, to improve the ease of accessibility, they recommend that:

Information should be complete, easily accessible, technology and platform neutral, in local language and bereft of technical jargon.

*(Times of India, April 2013, online)*<sup>17</sup>

In this way, the policymakers show their concern about making information more useful to the wider population. These guidelines on the mechanism to operationalise transparency would help actors achieve effective, rather than nominal, transparency, as

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<sup>16</sup> <http://www.firstpost.com/politics/let-their-be-transparency-in-ppp-projects-says-pm-81935.html> accessed 1 June 2013

<sup>17</sup> <http://timesofindia.indiatimes.com/india/Govt-shifts-stand-wants-PPP-project-details-revealed/articleshow/19587780.cms> accessed 1 June 2013

categorised by Heald and Hood (2006). Moreover, although the government acknowledged the improved accessibility to information through the RTI Act, they raise questions about the quality of the information disclosed as opposed to quantity in terms of numbers of RTI applications (*Times of India*, April 2013). This means that although the number of RTI applications indicates the amount of information being disclosed, there should be a check on exactly what information is divulged.

#### **4.6 Theoretical framework to investigate transparency**

It is argued that, throughout the project cycle, public interests must be protected within the decision-making process, and transparency must be operationalised in terms of disclosing information on how these interests have been addressed during that process. Moreover, the public sector must make that information accessible to the public for scrutiny at any point in time.

I explored the academic literature on transparency in terms of its mechanism and purposes, and barriers to transparency, with an aim of understanding the concept of ‘transparency’ beyond mere ‘disclosure of information’, and to understand the criteria for a transparent project. Three main criteria have emerged from the discussion on the mechanism of transparency: whether there are any clear rules and regulations; whether such rules are documented; and whether those documents are easily accessible by the public for scrutiny of the decisions made. Depending on the particular phase of project development concerned, there will be requirements to disclose different types of information to different actors. The stated purposes of transparency have already been discussed in Section 4.5 above, and are largely drawn from UNDP’s guidelines on what defines a transparent project. The bigger purposes of and barriers to transparency have been discussed while considering the academic literature in Chapter 3. A combination of the mechanisms of transparency, its stated and bigger purposes, and barriers to transparency builds up the framework to investigate transparency. In terms of fieldwork, I have mainly collected data on the mechanism of transparency that is in place in various phases. Based on such data, I discuss whether the stated and bigger purposes of transparency were met. In cases where they were not, or the criteria mentioned above were not reached, barriers to transparency are explored. Table 4.2 shows the strategy for analysis. Following this, there are three tables, Table 4.3, 4.4 and 4.5, presenting the theoretical framework to investigate transparency in the three major phases identified from Chapter 2.



Table 4.2: Strategy for analysis

<b>Data collection / discussion</b>	<b>Component of framework</b>	<b>Part of analysis</b>
Data collected on	Mechanisms of transparency	First part of analysis
Discussion on	Stated and bigger purposes of transparency	Second part of analysis
Discussion on	Barriers to transparency/ meeting purposes of transparency	Third part of analysis

Table 4.3: Phase I (Project decision, PPP adoption, form of PPP selection, and partnership formation)

	Are there clear rationales (showing public interests are protected in the decision)?	Are those rationales documented?	Are those documents easily accessible by public?
Project decision			
PPP adoption			
Selection of form of PPP			
Partnership formation			

#### **Are the stated purposes of transparency being met?**

- Do the public sector maintain their accountability about project decision, PPP adoption, and form of PPP selection (as discussed under section 4.5.1)?
- Does transparency help to combat corruption, especially during partnership formation (as discussed under section 4.5.1)?

#### **Are the bigger purposes of transparency being met?**

- Do public-sector decisions go through public scrutiny?
- Is the instrumental role of transparency served?

#### **What are the barriers to transparency?**

## **Criteria to assess transparency in Phase II: Project design and land development**

Sl. No.    Criteria

- a            Is project information proactively disseminated amongst wider population?
- b            Is there clear information about exact impact of a project on individual properties?
- c            Is there clear information about basis and amount of compensation offered?
- d            Is the information disclosed in a timely manner?
- e            Did the affected population understand the information effectively?
- f            Was there any window to express their concern?
- g            Was their feedback incorporated into the design?

### **How are the stated purposes of transparency being met?**

- Is infrastructure delivered in a corruption-free manner?
- Are the purposes of stakeholder involvement met?

### **How are the bigger purposes of transparency being met?**

- Is the rule of democracy and informed consent followed?
- Does the project promote social justice?
- Is a culture of openness created?

### **What are the barriers to transparency?**

Table 4.4: Phase III (Project construction and maintenance)

	Are there clear rules and regulations?	Are those available to the stakeholders?	Are they strictly implemented?
Project specifications			

#### **Are the stated purposes of transparency being met?**

- Are the previously decided obligations of actors and clause regarding compensation strictly implemented (as discussed under Section 4.5.1)?
- Is the previously agreed performance contract strictly implemented (as discussed under Section 4.5.1)?

#### **Are the bigger purposes of transparency being met?**

- Do the project specifications and standard contractual arrangements help potential private-sector investors to make realistic investment decisions?
- Does they ensure public sector's accountability towards the wider population in terms of delivering pre-decided quality of project?

#### **What are the barriers to transparency?**

### **4.7 Summary**

This chapter explored the understanding of transparency as discussed in the PPP literature and as it has been represented in PPP in practice. Following the central argument of this study, this chapter produced a nested theoretical framework to investigate transparency in the PPP project development process. In the process of developing the theoretical framework, it explored transparency both in depth and breadth. In depth, it investigated the understanding of transparency beyond mere 'disclosure of information', and through the mechanism of, purposes of and barriers to transparency. In breadth, it looked at transparency beyond the partnership formation stage, exploring the public sector's need to be transparent in decision-making throughout the project cycle, to prove that the public interest has been protected in the decisions made.



## **Section III: Data Collection**

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**[Chapters 5 & 6]**

## Chapter 5. Methodology

*Research methodology has a key role in generating knowledge on projects and their management. However, if the epistemological base of our research is weak, then it must also be the case that progress in developing the knowledge base for research and practice in the field is also weak. Thus the primary question being explored is whether we are careful enough in the selection and application of methodologies.*

(Smyth and Morris, 2007: 423)

### 5.1 Philosophical underpinning of research

I adopt a critical realist approach as an epistemological position to investigate transparency (Archer *et al.*, 1998; Sayer, 2000). Although Roy Bhaskar first spoke about critical realism (Archer *et al.*, 1998), there are many schools of thought. I adopt Andrew Sayer's (2000) and Ray Pawson's (2006) approaches, as they provide the necessary instruments to investigate transparency using the proposed theoretical framework as developed in the last chapter.

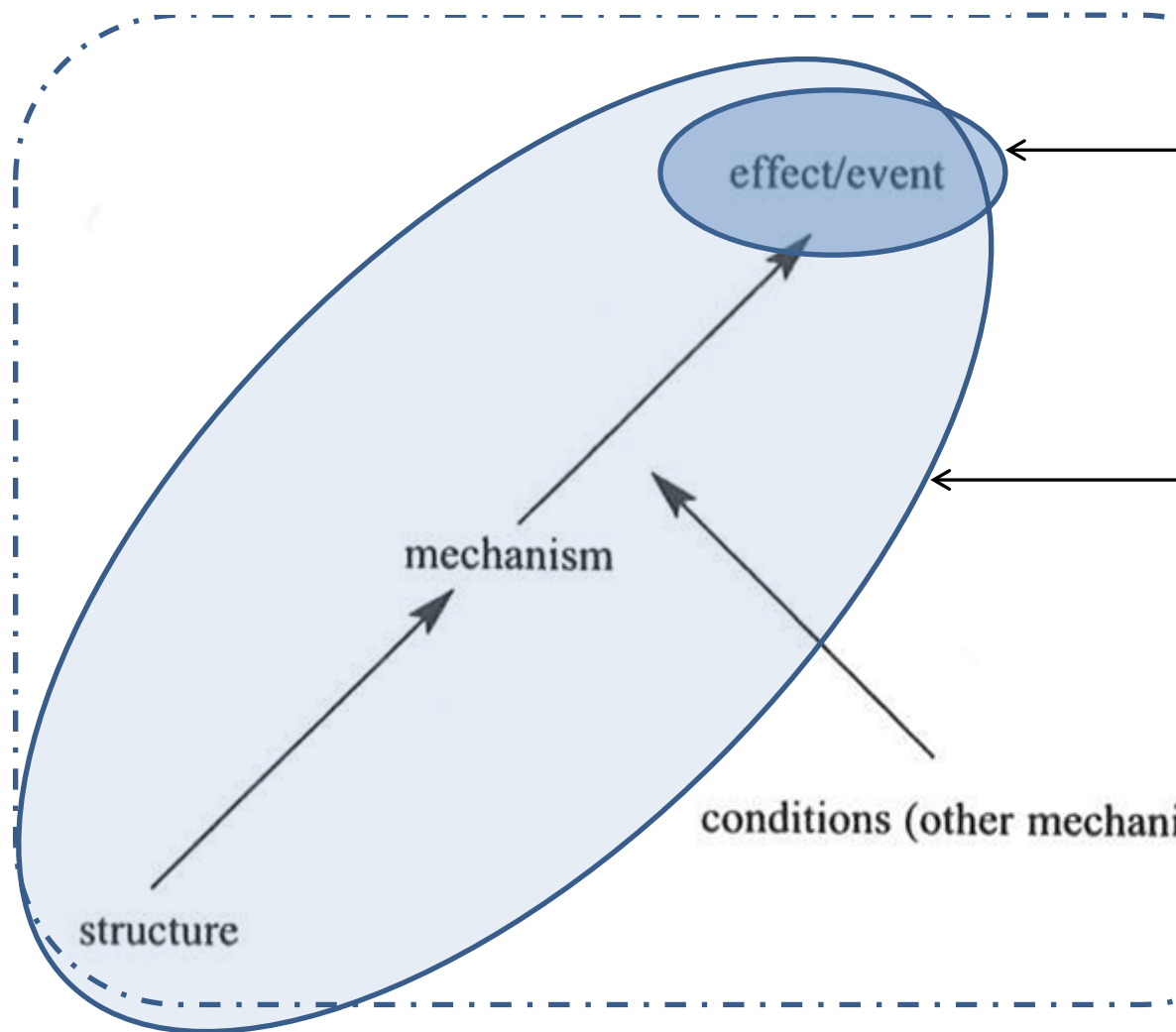
Pawson's (2006) approach is particularly interesting as he applies realism to policy evaluation. Firstly, realists distinguish between 'generative' and 'successive' accounts of causation. The former takes into account the complex nature of causation in open systems. Hence, realists do not understand causation in terms of the regular success of events (Sayer, 2000). Secondly, he considers context (C), generative mechanisms (M) and outcome configuration (O) as the three basic components of realist causal explanation. Based on these key elements, Pawson (2006) provides a way of understanding how policy intervention works and how its effects can be evaluated. He suggests that, 'interventions offer resources that trigger choice mechanisms (M) which are taken up selectively according to the characteristics and circumstances of subjects (C), resulting in varied patterns of impact (O)' (Pawson, 2006: 25). These three locations are key and mandatory sources of evidence in a realist approach.

Pawson's (2006) approach is useful in understanding the proposed theoretical framework developed in the last chapter, considering that policy intervention is made to improve the transparency of the highway development process through PPP. The component on the mechanism of transparency must be read in relation to the context. The degree to which the stated and bigger purposes of transparency are met would depend on the selection of the mechanism, influenced by the characteristics and circumstances of subjects. This also

indicates that selecting another mechanism to operationalise transparency would have better met its purposes.

Following Sayer (2000), critical realists distinguish between real, actual and empirical. They argue that underlying structures and mechanisms may not always lead to empirical evidence due to the existence of countervailing forces, as graphically represented in Figure 5.1 (Sayer, 2000). These countervailing forces are useful in understanding barriers to transparency in the proposed theoretical framework.

Figure 5.1: Critical realist view of causation



Source: Sayer (2000: 15)

Sayer's (2000) approach also provides a basis to explore barriers to transparency as this approach identifies two forms of power: causal power (the capacity to behave in a particular way) and passive power (the susceptibility to certain kinds of change). He acknowledges that passive power can only be seen when exercised, and that there is always a probability that some power may remain unexercised. The actual is what happens when the unused power is exercised (Sayer, 2000). This passive power can also potentially either be a barrier to transparency or meet the purposes of transparency. It claims that a closed system does not exist in the social world; thus, countervailing forces will always exist in an open system. This means that whatever may empirically look like having causal relationship may not actually be causally related in reality. As Smyth and Edkins (2007) outline:

Critical realist methodology underpins the work, recognising that relationships have causal powers and liabilities, yet are contingent upon project context.

(Smyth and Edkins, 2007: 237)

Therefore, as discussed above, following the two approaches to critical realism mentioned above, the framework of transparency can be better investigated in terms of a critical realist approach. For instance, 'disclosure of information' is potentially effective mechanism for achieving transparency, but its effects may not be maintained due to the corrupt context or underlying corrupt structure in which it operates.

## **5.2 Research design and strategy: case study**

Following the critical realist approach, I adopt an inductive qualitative approach and a case study method. Case studies are known for providing rich, in-depth, context-dependent knowledge (Flyvbjerg, 2004). Methodologically, a realist approach supports research with a single case study, as this approach does not emphasise regularities of events and numbers of occurrences (Sayer, 2000). Instead, its main strategy relies on theoretical proposition. In this case, the proposition is that transparency must be comprehensively investigated in both depth and breadth, in terms of the mechanisms of, the stated and bigger purposes of, and barriers to transparency, and in all three phases of project development. Otherwise it would be considered narrowly defined in PPPs.

The second strategy followed by this case study is to examine rival explanations (Yin, 2008). Here the aim is to define and test them. Following the critical realist approach, this is appropriate, as critical realists distinguish between the empirical, actual and real. In



such cases, examining rival explanations with triangulation of data is followed. However, there were constraints in doing so due to restricted access to data. The strategy has been applied in instances where this was possible.

### **5.3 Case studies and justification for the selection**

The focus of this research is on the highway sectors in India, which has become largely dependent on PPP, both at the national and state government levels, as the means to provide a safer and better highway network. The National Highways Authority of India (NHAI) has adopted the National Highway Development Programme (NHDP); Phase III of NHDP uses the Build-Operate-Transfer (BOT) model as the sole tool for the development of highways. In addition, state governments are increasingly adopting this model for developing their own highways. This highway planning system in India is elaborated upon in Chapter 6.

This study considers three highway projects from the eastern part of India for investigation. Two projects were selected from the region of Jharkhand and one from a neighbouring state, West Bengal. Of the two projects from Jharkhand, one is the Hazaribagh–Ranchi Expressway widening project, a national highway project, and the other is Ranchi Ring Road, a state highway project. The project from West Bengal is Second Vivekananda Bridge, a national highway project (see Table 5.1).

Jharkhand was selected because of its reputation for lack of transparency. Jharkhand is politically unstable and vulnerable state in the eastern part of India. This region is underdeveloped and can be considered as a backward state in terms of socio-economic status, with little infrastructure, and lagging behind in delivering projects through PPP. This region is known for an unfortunate murder case related to highway development where an NHAI official was murdered in relation to exposing corruption in highway development (*The Hindu*, March 2010, online).<sup>18</sup> This incident triggered a new Whistleblowers' Act. On the basis of such a background, it offers an interesting setting to explore the subject of 'transparency' both in empirical and real terms. Of the two selected projects located in this region, the Hazaribagh–Ranchi Expressway widening project was in the preliminary construction phase during the first phase of fieldwork; while Ranchi Ring Road, the state highway project, was in the advanced construction phase. However, Jharkhand did not have any highway project to be delivered through the PPP model in its

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<sup>18</sup> <http://www.thehindu.com/news/national/three-get-life-in-satyendra-dubey-murder-case/article315939.ece> accessed 1 June 2013

maintenance phase during the fieldwork. As the proposed framework on transparency also aims to investigate transparency in construction and maintenance phase, the third project was selected from neighbour state, West Bengal.

Within the region, projects were selected on the basis of at which stage they were with regard to the three phases of development process, i.e. Phase I: Project decision, PPP adoption, selection of form of PPP, and partnership formation; Phase II: Project design and land development; and Phase III: Project construction and maintenance. The two projects from Jharkhand provided suitable cases for the first two phases, and the third from West Bengal provided a suitable case for the maintenance phase. Furthermore, this project used the BOT toll model as opposed to the BOT annuity model, which was used by the two projects in Jharkhand. The toll model offers a different business model.

Although this study considers three projects, at times a single case has been used to analyse a particular theme, as the different projects were in different phases of development, and it was not always possible to access data related to all phases. Such use of a single case is justified under the framework of the critical realist approach. However, efforts were made to triangulate the available data (Meyer, 2001; Yin, 2008) to achieve vigour in data collection and analysis.

The following is a brief account of details on data availability for each case. A more detailed description of cases is discussed in the following chapter on context. Table 5.1 graphically represents each project's detail and status during fieldwork.

Table 5.1: Use of various projects to investigate different phases of PPP delivery process in various phases

<b>Region</b>	<b>Name of project</b>	<b>National/state highway</b>	<b>PPP model (BOT)</b>	<b>Status during fieldwork</b>
Jharkhand	Hazaribagh–Ranchi Expressway	National	Annuity	Land development/ construction
	Ranchi Ring Road	State	Annuity	Land development/ construction
West Bengal	Second Vivekananda Bridge	National	Toll	Maintenance

### **5.3.1 Hazaribagh–Ranchi Expressway**

Hazaribagh Ranchi Expressway Limited (HREL) is the concessionaire for the Hazaribagh–Ranchi Expressway widening project. The project is geographically located in the state of Jharkhand. The project is based on the BOT annuity model, whereby the NHAI, the client for the project, is bound to pay the concessionaire an annuity payment at regular intervals of six months, starting from the date when commercial operation begins. Hence, the main challenge for the concessionaire of this project is to finish construction on time, if not before, in order to begin receiving payment. After the financial closure of the project, i.e. after all financial issues have been completed, the concessionaire must start construction. To do so, they must first acquire ownership of the land from their public-sector partner. As discussed in Chapter 2, land acquisition is a critical risk in PPP project development in the global South, including India. As confirmed by Singh and Kalidindi (2009) and also from the contract accessed during fieldwork, the risk lies on the side of the public sector. However, in practice, it is the private-sector concessionaire who takes the risk through the preparatory investment they have made; as a result, they are keen to start the project as soon as they can.

### **5.3.2 Ranchi Ring Road**

This is a state highway project where the client is the Road Construction Department of the state of Jharkhand. It also uses the BOT annuity model and is at an advanced stage of construction. As understood from the key contacts during fieldwork, this project is amongst the pioneering PPP projects in Jharkhand and reflects the strengths and weaknesses of the region, as there have been several changes in the state government since the project was started, resulting in an adverse impact on its progress.

### **5.3.3 Second Vivekananda Bridge**

This project is a national highway project, part of the Golden Quadrilateral (GQ) project, located in the vicinity of Kolkata Metropolitan Area, in the eastern region. It is a BOT model toll project and one of the first PPP projects in India. The private-sector firm involved was the single bidder for the project. While this project was being formulated and constructed, the concession agreement with NHAI was at a preliminary stage. The

standard document on Model Concessionaire Agreements,<sup>19</sup> which is now available on their website, has been developed over time, incorporating learning experiences from this project.

Since it is a toll project, it reveals the wider range of externalities for such a project and the wider range of risks a private-sector investor has to take. Also, since the project had been in operation for two to three years during the fieldwork, it provided a complete picture of the problem areas for a project from inception to construction and after completion.

In this case, the private-sector concessionaire was approached through a professional network. I did not have to secure separate permission to approach the public-sector side. As my key contact for the project was in a higher public-sector authority during the construction of the project and had been moved to the private-sector side during maintenance, core actors for the project were very cooperative when this fieldwork was conducted.

#### **5.4 Pre-fieldwork preparations**

In the pre-fieldwork phase, the first task was to identify a few gatekeepers who would introduce me to the key actors for selected projects by sending out emails and contact numbers, and contacting through referrals. One reason for getting hold of a gatekeeper, in addition to a formal introduction from my university, was that it would help to improve my credibility with public sector actors, private sector concessionaires and affected communities. As I am registered at a university in a foreign country, it was perceived that the main actors might not feel very comfortable sharing their information (Bogason and Zølner, 2007). Getting to know the researcher through a gatekeeper assures the participants that they can trace the researcher back through their familiar connections. Having a local base improves trust; this trust influences the quality of the interview, access to meetings and agreement on cooperation with the researcher. However, it was possible to identify a gatekeeper only for the Second Vivekananda Bridge project, to be introduced to core actors, and for the Hazaribagh–Ranchi Expressway widening project, to be introduced to affected communities.

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<sup>19</sup> <http://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&sqi=2&ved=0CCEQFjAB&url=http%3A%2F%2Fwww.nhai.org%2Fannuity.pdf&ei=wHrfU-jvKsaXuAS0noCAAg&usg=AFQjCNEsoKgkclmyolzXZIWA6AhzjwYlxA&bvm=bv.72197243,d.c2E> accessed 4 August 2014.

The next task during the pre-fieldwork preparation was to contact the key actors for those projects in advance to decide on a time for visit. This started out by emailing individuals in related organisations using the contacts given on websites. After this, if no response was received within two weeks, phone calls were made to follow up. However, developing such contacts from a long distance presented considerable difficulties due to lack of face-to-face contact.

The contracts mentioned above were official actors formally recognised in the legal contractual arrangement. The names of external/informal actors are not published on websites or in any formal document. I had to find out the names of the informal actors during the formal actor interviews, through confidential documents such as minutes of meetings, and also newspaper articles and the snowball method.

## 5.5 Data collection methods

This section elaborates on the methods of data collection. Table 5.2 below summarises the data collection methods used for each case. It is followed by a brief description of the methods used to collect data.

Table 5.2: Summary of data collection method for each case

Method	Hazaribagh–Ranchi Expressway widening project	Ranchi Ring Road	Second Vivekananda Bridge
<b>Documents accessed</b>	<ul style="list-style-type: none"> <li>- Five Year Plans by Planning Commission, Govt of India, New Delhi.</li> <li>- National Highway Development Project Reprots accessed on Ministry of Road Transportation and Highway website;</li> <li>- Detail Project Report, Hazaribagh Ranchi Expressway project, HREL, accessed in Jharkhand, India in August 2010</li> <li>- Model Concessionaire Agreement for BOT projects, accessed in Jharkhand, India, in</li> </ul>	<ul style="list-style-type: none"> <li>- Detail Project Report, Ranchi Ring Road, accessed in Jharkhand, India in August 2010.</li> <li>- Model Concessionaire Agreement for BOT projects, accessed in Jharkhand, India in September 2010.</li> <li>- Minutes of meetings of JARDCL with State Government Departments acquired from JARDCL office, Ranchi, India</li> <li>- Independent Engineer's Report:</li> </ul>	<ul style="list-style-type: none"> <li>- Detail Project Report, Second Vivekananda Bridge.</li> <li>- Model Concessionaire Agreement for BOT projects, accessed in Kolkata, India in August 2010.</li> <li>- Minutes of meetings acquired from private-sector concessionaire during maintenance, Kolkata, India</li> <li>- EIA</li> <li>- Traffic Study</li> <li>- Independent Engineer's Report: Monthly O&amp;M Report, July 2011 by Louis Berger</li> </ul>

Method	Hazaribagh–Ranchi Expressway widening project	Ranchi Ring Road	Second Vivekananda Bridge
	<p>September 2010</p> <ul style="list-style-type: none"> <li>- Minutes of meeting for meeting between NHAI and State Government Departments, January-August 2010, accessed in August 2010</li> <li>- EIA</li> <li>- Traffic Study</li> <li>- Media report on Ramgarh bypass</li> <li>- Smoke alarm on Kujju Bypass, <i>The Telegraph</i>, 16 August 2009</li> <li>- The burning highway at Kujju (near Ramgarh), blog, 6 January 2010</li> <li>- Jharkhand: Maoists torch costly machinery of road construction company, Ranchi, India, ibnlive.in.com, 22 April 2012</li> </ul>	<p>Report for Compliance Committee by Independent Consultant as on 23 July 2011 by Nicholas O'Dwyer Company Limited (JV) SA Infrastructure Consultant Pvt Ltd.</p>	<p>Consulting Private Limited. In joint venture with Yesa.</p> <ul style="list-style-type: none"> <li>- Online document on receipt of international award, 2008.</li> <li>- Flaws many in the making of bridge, <i>The Telegraph</i>, 22 May 2006.</li> </ul>
<b>Semi-structured interviews conducted</b>	<ul style="list-style-type: none"> <li>- Interview 01, August, 2010, Jharkhand, India</li> <li>- Interviews 02 ad 03, September, 2010, Jharkhand, India</li> <li>- Interview 04, August 2011, Jharkhand, India</li> <li>- Interview 05, September 2010, Jharkhand, India</li> <li>- Interview 06, September 2010, Jharkhand, India</li> <li>- Interviews 17–21, July 2011, Jharkhand, India</li> </ul>	<ul style="list-style-type: none"> <li>- Interview 05, September 2010, Jharkhand, India</li> <li>- Interview 06, September 2010, Jharkhand, India</li> <li>- Interview 07, September 2010, Jharkhand, India</li> <li>- Interview 06, September 2010, Jharkhand, India</li> <li>- Interview 08, September 2010, Jharkhand, India</li> <li>- Interview 08A, August 2011, Jharkhand, India</li> <li>- Interview 09, September 2010, Jharkhand, India</li> <li>- Interview 10, September 2010, Jharkhand, India</li> <li>- Interview 11, August 2011,</li> </ul>	<ul style="list-style-type: none"> <li>- Interview 12, September 2010, Kolkata, India</li> <li>- Interview 12A, August 2011, Kolkata, India</li> <li>- Interview 13, September 2010, Kolkata, India</li> <li>- Interview 14, August 2011, Kolkata, India</li> </ul>

<b>Method</b>	<b>Hazaribagh–Ranchi Expressway widening project</b>	<b>Ranchi Ring Road</b>	<b>Second Vivekananda Bridge</b>
		Jharkhand, India - Interviews 22–27, August 2011, Jharkhand, India	
<b>Accompanied site visits conducted</b>	- Accompanied Site Visit 02, July 2011, Jharkhand, India	- Accompanied Site Visit 01, August 2010, Ranchi, India	
<b>Group interviews conducted</b>	- Group Interview 01, July 2011, Mandu, Jharkhand - Group Interview 02, August 2011, Ramgarh, Jharkhand - Group Interview 03, August 2011, Ramgarh, Jharkhand		
<b>Non-participant observation</b>		- Non-participant observation 01, 23 July 2011, Ranchi, India	
<b>Field notes</b>	- Field note 01, July–November 2010, Kolkata/Ranchi, India - Field note 03, July 2011, Ranchi, India - Field note 04, August 2011, Ranchi, India - Field note 06, August 2010, Ranchi, India	- Field note 02, August 2010, Ranchi, India - Field note 05, August 2011, Ranchi, India	

### **5.5.1 Document analysis**

The two main methods used in this research are document analysis and semi-structured interviews. Document analysis was carried out as the first part of the research, where ‘disclosure of information’ through documents was investigated. Whereas for Phase I this was one of the main methods, for Phases II and III document analysis was accompanied by other methods for data triangulation. Two main categories of document were accessed: core and peripheral documents (Krippendorff, 2004). The former included all official documents, generated by core developers of projects. These were the policy document, Detail Project Reports (DPR), Model Concessionaire Agreements (MCAs), traffic studies,

Environmental Impact Analysis (EIA) reports, minutes of meetings of core actors, and independent engineers' (IE) reports. These documents were generally available from both public- and private-sector partners. The peripheral documents were mainly the media reports and blogs that were either accessed online or accessed in hard copy and are attached in Appendix G.

However, during the fieldwork, when core actors were approached, they preferred to refer the researcher directly to two main reports: the Detail Project Report, which provides details of the project, and the Concessionaire Agreement, which describes the contractual arrangement between public- and private-sector parties. These two documents are of utmost importance to them. Having decided on the type of core document, a thematic analysis was carried out, based on the topics corresponding to the research, narrowed down from the table of contents of such reports. The following is a brief discussion about document analysis.

#### **5.5.1.1 Policy documents**

Basic policy documents are studied to understand Phase I (Project identification and project design). As highway projects are part of a broader planning framework, relevant policy documents were studied in order to understand transparency in project Phase I. The main policy documents were the Five Year Plans and the National Highway Development Programme document. These were accessed online on the websites of the Ministry of Road Highway Transport, the Ministry of Economic Affairs, PPP, and the NHAI. It was not possible to access any policy document for Ranchi Ring Road.

#### **5.5.1.2 Detail Project Reports**

The second important document was the Detail Project Report (DPR), which is identified as the draft performance specification report. This document was prepared under the guidelines of the core public-sector partners. This report was studied to investigate transparency in both Phases I and III. Normally, external private-sector consultants prepare such reports; the level of detail in the report depends on both the project and the consultant. The main focus of the analyses was on two sections of the report: a) project identification and b) benefits to be gained from the project. Any kind of engineering detail related to the structure of the road was beyond the scope of this research. The



purpose of analysing these two sections was to understand the mechanism of transparency in place that related to Phase I.

#### **5.5.1.3 Model Concessionaire Agreements**

The Model Concessionaire Agreement (MCA) is a standard contractual legal agreement between the public- and private-sector partners. This document was mainly studied to investigate the mechanism of transparency in place that related to Phases II and III. This legal document consists of clauses on risk distribution amongst actors in terms of their obligations and deliverables in a time-bound manner; it also includes clauses on other parties' right to claim compensation in case actors fail to deliver the product on time.

#### **5.5.1.4 Traffic studies**

The traffic studies could be accessed for all three projects. They were prepared as part of the preliminary project design process. Although I did not intend to study the technical details and transportation forecasting models, I analysed them in order to find out the exact target area of a project in the process of project identification.

#### **5.5.1.5 Environmental Impact Analysis Reports (EIA)**

Detail Project Reports normally have a section on Environmental Impact Analysis (EIA). I analysed this section in order to understand the mechanism of transparency in place during Phase II. In addition to the environmental assessment, the EIA section has a subsection on the Rehabilitation Assistance Program (RAP), which outlines how the core developers should assist displaced people in order to acclimatise them to their new homes smoothly. This subsection should ideally provide material to understand the issue of transparency during project development, as reflected in the literature on large-scale infrastructure development (Bank, 2008; Flyvbjerg *et al.*, 2003).

#### **5.5.1.6 Minutes of meetings**

The sixth set of official core documents is the minutes of meetings between core actors and state government departments. Minutes were mainly studied in relation to Phases II and III. This is a very useful type of document, as it gives a picture of the dialogue between actors, especially given that a number of meetings had previously taken place and were therefore impossible for me to attend. The minutes of meeting can be compared

with the decision document. This also applies to cases where I was denied access to meetings on the basis of confidentiality. Minutes of meetings are public documents so could be accessed through the public-sector partner's office.

#### **5.5.1.7 Independent engineers' reports**

Independent engineers (IE) are actors responsible for monitoring of project construction and maintenance. They are appointed by the public-sector partners for whom they prepare monthly reports. The IE reports are archived for future reference and decision-making. These reports were referred to in the process of understanding the existing mechanisms of transparency during Phase III. As this document is prepared during the project construction and maintenance process, the literature on transparency in PPP rarely mention the IE reports.

#### **5.5.1.8 Peripheral documents**

Apart from the above-mentioned core documents, peripheral documents – mainly media reports – were generated over time, mostly when the project became visible to the wider population and they became concerned about its impact on them. For the purpose of this study, media reports were consulted depending on the topic of discussion. They were mainly studied to understand how information about the project is disclosed to the wider population, both in advance of and during project development. This point is of significance when seeking to understand transparency about the project vis-a-vis the wider population, and also in terms of maintaining accountability. The role of media in a democracy has been noted as forming public opinion (Sen, 1999; Florini, 2007). There might be a question about the validity of the data as the media seeks to manufacture news from incidents and exercises some form of power in doing so. In this case, I had to be critical in accepting this as a valid form of data, so triangulating data was a good strategy for improving its internal validity. Figure 5.2 below shows the strategy for content analysis.

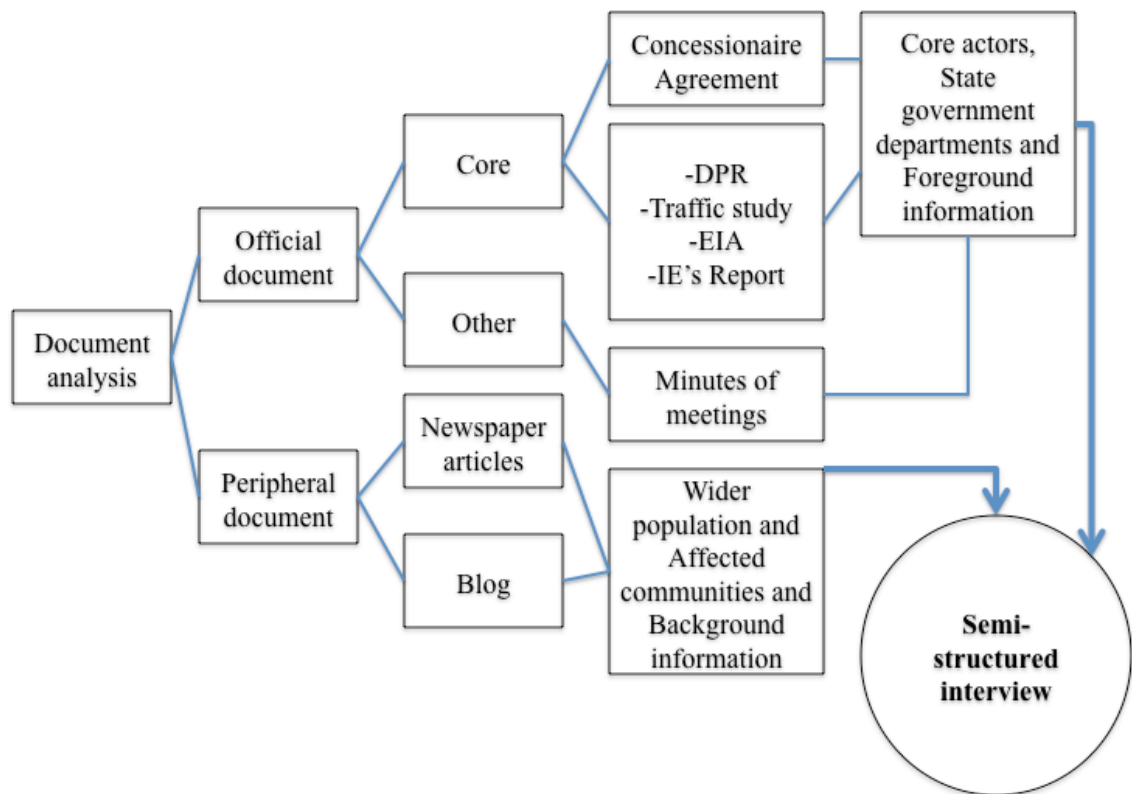


Figure 5.2: Strategy for content analysis

Source: Author

### 5.5.2 *Semi-structured interviews of key informants*

Semi-structured interviews were the second main method for data collection. They were used to collect data on the process of document preparation, explain points in documents and on the process of project identification, project design, land preparation, land acquisition, and construction and maintenance that were not understood.

The public-sector director, private-sector concessionaires, project managers and IEs were interviewed for the Ranchi Ring Road and Hazaribagh–Ranchi Expressway widening projects. In the case of the Second Vivekananda Bridge, it was possible to interview the private-sector concessionaire only. They were approached with open-ended questions that allow them to elaborate on the process of project development. Because this study attempts to understand ‘transparency’ in terms of the contrast between the empirical evidence on ‘disclosure of information’ and the underlying structure in reality, the follow-up semi-structured interview is considered one of its most important methods. Semi-structured interviews with the core actors generated substantial data for the project (Barriball and While, 1994). Table 5.2 summarises the interviews conducted.

### **5.5.3 *Non-participant observation***

Non-participant observation of formal meetings between core developers of projects and state government departments was the third method of collecting data about core project development. Due to confidentiality issues, access to such meetings was highly restricted. However, I was allowed to attend one meeting of the state government actors and private-sector actors for the Ranchi Ring Road project.

I attended a compliance committee meeting related to the state highway project, Ranchi Ring Road, between Infrastructure Leasing & Finance Services (IL&FS) and Jharkhand Accelerated Road Development Construction Limited (JARDCL), together with the IEs, arranged at the private-sector concessionaires' office in Ranchi on 23 July 2011. In the meeting, the IEs reported to the committee about the progress of the project. This was a monthly meeting, which was supplemented by a monthly report presented by the IEs on their observations and recommendations. Six people, including the secretary of the Road Construction Department, the concessionaire director for the project and IEs attended it. There was one person appointed by the concessionaires to note down the minutes of the meeting.

As I will discuss later in Chapter 9, it was very useful to be able to attend this meeting, as it demonstrated how minutes of meetings are prepared in an unequal power setting, especially as I collected information on other meetings from the minutes only. The advantage of this method is that it shows the true dynamics of the setting. Its disadvantage is that it can potentially influence actors to act differently due to the presence of the observer, hence leading the researcher to collect biased data. However, this was apparently not so in this case. This was a monthly meeting between actors to report on the progress of the project. Both public- and private-sector actors have a financial stake in decision-making; hence, they more or less reacted normally to secure their own interests and positions. Sometimes, it is suggested that researchers hide their identity in order to undermine any such disadvantage. This was not possible in this case, as the group was very small and involved higher-level state government officials. Hence, the researcher was introduced to the group before commencement of the meeting. The secretary of the state government Road Construction Department kept on clarifying points to me whenever felt necessary. It would have definitely been useful to be able to attend one or two other meetings, also in the case of the national highway projects. This would have revealed more realistically the power relations between the national highway authority and state government officials. For instance, there was no way to know how the matter of

the 'Save the Land Committee' from the Hazaribagh–Ranchi Expressway widening project was actually discussed amongst actors and whether anyone lobbied the decision-makers to re-route the road through Ramgarh rather than widening the existing one.

Attending one meeting also proved the restriction of collecting data from minutes of meetings, where I had to look into the discussion and decisions made in the meeting through the person who wrote the minutes. Like any other document, the author writes the minutes with a particular audience in mind and a particular purpose. Therefore, it was important to be critical about analysing minutes of meetings, bearing in mind the source. However, despite these limitations, they provide a useful source of information about what was discussed and what could have been discussed but appeared not to have been.

#### **5.5.4 *Accompanied site visit***

The accompanied site visit was one of the methods to collect data from the affected communities. This is different from non-participant observation, which implies a closed setting with a definite number of identified actors who have gathered together for some specific purpose. The accompanied site visit refers to the researchers' visit of a particular site, in this case, where lands are to be acquired soon by the public sector for the purpose of road construction, or a site where land has been acquired and road is under construction. Such sites were identified either from the formal actors involved in the process of road development, or from official documents on particular projects, or gatekeepers or other local people. For the case of Ranchi Ring Road, site visits were organised by the project directors on request from the researcher, and the project manager accompanied the researcher during the visit. I organised visits on my own in the case of the Hazaribagh–Ranchi Expressway widening project. The advantage of the method was that the researcher obtained first-hand experience of how the physical development of the site was progressing on the ground, and observed the affected communities' experience of the transparency of the highway development process. Besides being able to conduct group interviews with the affected communities, I was able to see the physical condition of the site during the land acquisition and land development process. This would not have been possible without such a visit. The constraint of the method was that, firstly, it was risky to visit the site where affected communities were greatly aggravated. Although initially they were under the impression that I was visiting the site as part of the road construction authority – especially as the gatekeeper tried to circulate that in anticipation

of cooperation – I had to make it clear that I was merely a researcher. Despite this, one of the members from the ‘Save the Land Committee’ opposing the Hazaribagh–Ranchi Expressway widening project said that, ‘We are happy that you are at least writing about us.’ In terms of information, there was an opportunity to collect it; there was a possibility of collecting biased information as the affected community might over-represent their aggravation in the hope of sympathy. The other possible constraint would be that the researcher would only find out about the project developers’ side of story, especially during the accompanied site visit. I had also visited the site on my own where I deemed this necessary, using local contacts.

#### **5.5.5 *Group interview***

Group interviews were also used in the second part of the fieldwork. The purpose was to collect data on the effectiveness of mechanisms of transparency in place, as experienced by the affected communities, in the form of information available about land acquisition and the mechanisms in place to satisfy the affected communities’ needs. Sites for those interviews were selected from accompanied site visits and using the snowball method. In the case of the Hazaribagh–Ranchi Expressway widening project, dissatisfied affected communities were identified from minutes of meetings and from local people. It was considered necessary to interview them to understand their experience of transparency with the highway development process. In the case of the Mandu area, on the same project, affected communities were informed in advance about a meeting at a given time and place. In the case of the Ramgarh area, it was risky to prearrange a meeting; hence, I had contacted ‘the head of the village’, who sent a gatekeeper with me to talk to the relevant important people. In addition, as I had visited the site physically, other people from the affected communities showed up to discuss the project and their concern. The selection of sites depended very much on the availability of a gatekeeper in the area, as local people would not speak to an outsider on such a sensitive issue. The locations and times for such interviews were pre-decided with the help of a powerful actor in each region. During the visits to both Mandu and Ramgarh, I was accompanied by a gatekeeper and the driver of the hired car from my personal contact. The advantage of this method was that it gave me an insight into affected communities’ dissatisfaction with the land acquisition process and the exact rationales for their dissatisfaction. The disadvantage of the method was that, just as in the last method, it was very possible for these communities to overstate their dissatisfaction with the process in order to gain more

sympathy. However, it was not up to the researcher to influence any change in the decision, at least not in the short term. Without the use of these last two methods I would not have been able to get an insight of affected communities' reactions to such road development processes.

#### **5.5.6 *Field note***

Field notes are an important method in ethnographic research. Data collected through this method is mainly used to triangulate other empirical evidence. In this case, I treat field notes as equivalent to a thick description, as practised in grounded theory (Strauss *et al.*, 1990). While this is a well-accepted method in ethnographic research, it also has the potential to provide rich data for non-ethnographic studies such as this research. This method could be very useful for this study, as my access to data is influenced by the structure of the institution and the power relationships amongst the actors, which are ultimately also the subject of study for this research. Moreover, due to the sensitivity of the topic and restricted access to data, field notes proved to be a useful method.

Field notes included data collection through casual conversation with participants, especially during unstructured conversations, and the researcher's own diary-keeping on her impressions about the setting and actors. The diary was maintained from the very first day of fieldwork, including attempts to contact project developers via telephone. This method was useful for the research, in terms of exploring new factors that are dealt with by formal highway PPPs, and which were barely visible in terms of the formal partnership arrangement. Moreover, such discussion was completely absent from any formal interview. It was understood that it was not legitimate for the formal actors to discuss such issues in their official capacity. This was evident from my interaction with a senior-level officer from the Central Coal Limited (CCL) to discuss the illegal mining issue that had affected highway users' safety. Field notes are deemed to be an important method considering the constraints of the field, as discussed in the next section. However, I attempted to raise these topics through more structured methods, such as peripheral document analysis and semi-structured interviews, in order to improve internal validity. The constraint of such a method is that the data collection instruments are unstructured, and therefore there is a chance that the interpretation of data is left to the researcher without any scope for clarification.

## 5.6 Data collection process

As discussed above and shown in Figure 5.3 below, the researcher aimed to collect data to investigate transparency from two perspectives: a) investigating the transparency mechanism as operationalised by core actors and project developers; and b) investigating it as experienced by the wider population. For the first part, document analyses, semi-structured interviews and non-participant observation were the main data collection techniques. For the second part, group interviews, accompanied site visits and field notes were used as main data collection techniques.

There were two field trips to India, respectively in July to September 2010 and July to August 2011. Data on project Phase I was therefore collected during the first field trip, and on Phase II was mainly collected during the second field trip. Data on Phase III was collected during both field trips, as represented in Figure 5.4.

For all three projects, the first part of the data collection started with document analysis, which involved analysis of core and peripheral documents. The process of accessing data took a substantial amount of time; first, core public-sector actors in Jharkhand were contacted. Then, permission to conduct fieldwork had to be acquired from head office at New Delhi before the actors at Jharkhand could provide any kind of project-related information. For the state highway project, permission was granted from the Road Construction Department at Jharkhand. Names and contact of core actors were partially accessed from the UK in advance through websites. Local actors – mainly in the affected communities – were identified in two ways. Firstly, the disturbed areas were identified from documents such as minutes of meetings available from core actors, and secondly, during fieldwork through the snowball method via gatekeepers and local actors. Such actors were excluded from the formal development process, and hence, were not identified as stakeholders in formal documents or interviews with core actors. Core and other actors to be interviewed were identified from the document analysis. Semi-structured interviews were conducted regarding both core issues written in the concessionaire agreement and external issues identified from the peripheral documents. These interviews provided richer information on the actual process of production, which did not always conform to the written contract clauses. The data from the semi-structured interviews was also used to improve the internal validity of data collected from peripheral documents. Interviews were sometimes a follow-up of the content analysis and an attempt to explore and trace out the discrepancies found when comparing other documents (Bogason and Zølner, 2007). I was allowed to attend one monthly meeting between core



partners and IEs for the state highway project. In the case of national highway projects, I was able to access the minutes of the monthly meetings for the previous 12 months.

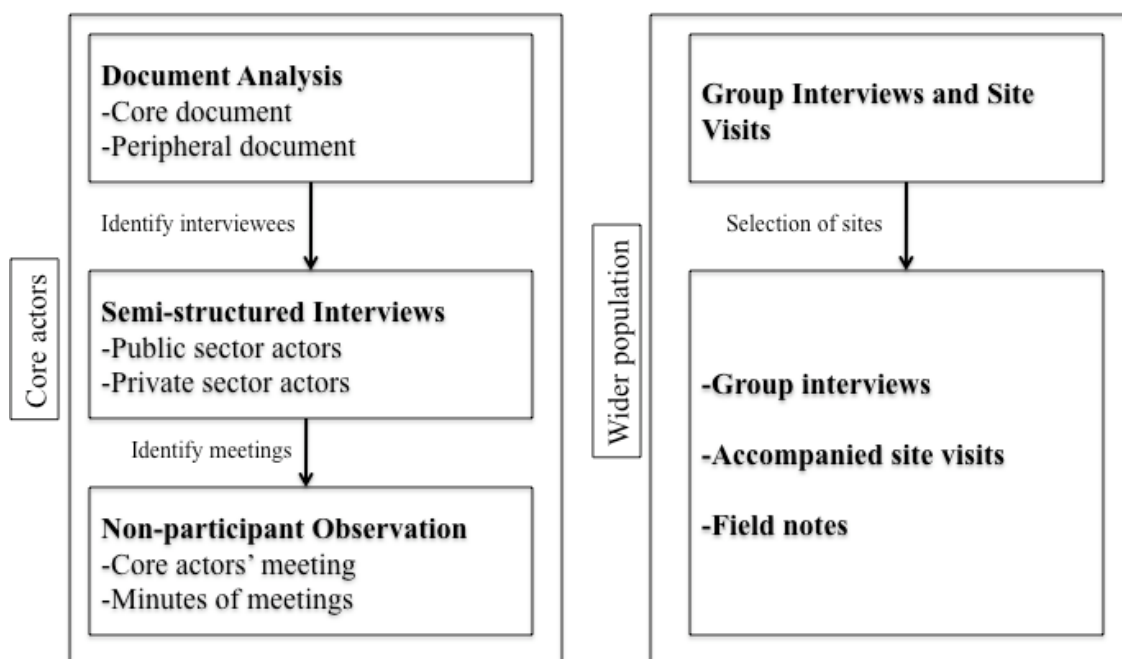


Figure 5.3: Diagram showing use of multiple data collection techniques

Source: Author

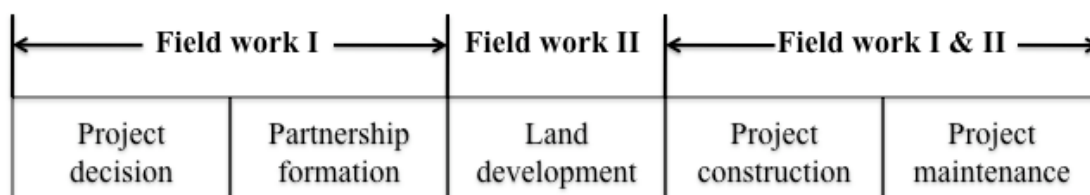


Figure 5.4: Phase-wise split of fieldwork

Source: Author

## 5.7 Constraints of accessing data

### 5.7.1 Fieldwork challenges and constraints

Obtaining access to data in this kind of region emerged as problematic, not only because of the government's perception of data sensitivity but also because of the constraints for the research participants in such a region, as well as the absence of documentation due to the political transition. It was necessary for the researcher to understand the limitations of the actors working in the region, known as India's 'most corrupt region', especially through media portrayals.

PPPs in highway developments conform to a legal partnership between the public- and private-sector actors. Since the public- and private-sector bodies are the core actors for such projects and have access to all project-related information, I had to approach actors on both sides to acquire access to any type of such information. Because private-sector actors work as consultants for the public-sector client, one cannot expect to access data through the private sector without the public-sector partner's permission under normal circumstances. On the other hand, as the public-sector partner has to maintain its accountability to the population through transparency, they are required to disclose such information to the general public, or at least to citizens of the nation. The RTI Act of India guarantees this right to every Indian citizen. Thus, the NHAI was bound to give me access to public information, as I am a citizen of India. However, my access was restricted to 'as admissible under Right to Information Act' (quoting from the permission letter issued by NHAI, enclosed in Appendix H). Thus, the public-sector partner had to permit me to access information, while private-sector partners had to cooperate with me only on the basis of permissions given by their partners.

In addition, the private sector maintains the confidentiality of their documentation in order to protect their trade secrets from their competitors. Thus, it would have been difficult to get access to data, even reports, through approaching the private-sector concessionaire directly, had I not had personal contacts or could not have developed a level of trust with them. One way of developing this trust would be an introduction through some form of network in which the concessionaire participates. It is important to remain aware that most of the time these contacts will be cross-checked during the fieldwork period.

The researched subject's confidence in the researcher varies depending on how she gets to know them. Ideally, both sides should be approached simultaneously; that is, securing official permission from the public sector and contacting the private-sector concessionaire through personal or professional networks. For this research, the first project that was approached for data collection was a national highway project, in its construction stage, located in a region under political transition. From prior experience, it was clear to the researcher that the private-sector concessionaire would not be willing to share any information until and unless they received instructions to do so from the public-sector client side, and as it was not possible to reach the concessionaire using any personal network, I had to make my first approach to the NHAI. The NHAI-side project director and project manager were first contacted with regard to the project in Ranchi (the city

where the NHAI local office for the project is located). Their contacts were available online. I was then directed towards the general manager of the state in the NHAI Delhi head office to secure permission. The whole process between the initial contact and gaining permission took approximately three weeks. As the project director was not able to cooperate without instructions from higher up, it was not possible to commence fieldwork before the formal permission letter arrived. This pattern of cooperation, or lack of cooperation, shows the constraints of conducting research in an institutional setting with a strong bureaucracy.

In addition to approaching public-sector actors as a researcher from the university, the researcher also tried to access those documents as an ordinary citizen at a later point in time. RTI requests were registered through the online RTI portal, requesting access to the documents with the payment of a minimal amount. The intention was to check ordinary citizens' ease of accessibility to the documents. Requests could be made only to central government departments through the online portal. Two requests were rejected as being outside the domain of central government departments; the third request on the Second Vivekananda Bridge is still pending. I received an official letter informing that my request related to the Ranchi Ring Road project had been forwarded to the Ranchi, Jharkhand office of the state government department on 5 June 2014. This request was made on 26 April 2014 and a follow-up email was written to the official concerned on 7 May 2014. Such an experience, with delayed responses to RTI, is not uncommon in the context of India. Copies of all the requests and replies are available in Appendix H.

The following quote comes from a report prepared by the International Institute of Sustainable Development (IISD) in Switzerland, which confirms the existence of the RTI portal to request information but long delays in its actual receipt.

A major challenge in this project was gaining access to relevant data. This included project-level documentation on the recommendations from, and implementation of, safeguards, as well as the concession agreements of the power and highway projects that were used as case studies. Despite our best efforts through phone calls, interviews, letters, and working with IISD's partners and friends in India, we had limited success in accessing these documents. This posed significant challenges to the research, especially as all the documents we were seeking were, by law, required to be available in the public domain. A request has been filed under the Right to Information Act (RTI) procedure, and, at time of printing, we are yet awaiting a response. The analysis in this report is based on secondary data and on the findings from several weeks of stakeholder consultations in India.

(Perera *et al.*, 2014: 6)

There were also challenges in terms of interviewing the actors. Some interviewees connected to the Hazaribagh–Ranchi Expressway widening project felt threatened, as if they were being ‘interrogated’, as the permission for the fieldwork came from the head office of the public-sector body, and they therefore challenged such an interview process. A request for a declaration on the consent form was found to be even more problematic. Such a perceived threat gave rise to an atmosphere of mistrust amongst the actors, and amongst actors and the researcher. From my point of view, the actors or interviewees were more comfortable when they were approached more informally; for example, being asked: ‘Can I talk to you regarding some matters that might not be reflected in the document and that might help me understand the situation better?’ Details of the interviewees by project are listed in Appendix A.

### **5.7.2 *Researcher's position***

The central topic of this research and the complexity at the setting of fieldwork demand an explanation of my position in the process of accessing data, understanding of bias in data and reflection upon my relation with the core actors and the wider population. With regard to my relation to the core actors, since the core actors cooperated with me in providing access to the project, I had, of course, a strong sense of gratitude towards them. However, depending on the subject of the research, and the constraints of the setting, I tried my best to triangulate data without disrespecting the core actors' position and without claiming truth in the absence of firm evidence. I had made an attempt to reflect upon my understanding of such dynamics in the setting to analyse data through field notes.

Understanding the sensitivity of the setting and the subject, I decided not to be too insistent about accessing certain data, as such insistence would not only close the door to any kind of future research, but potentially could also affect the trust level amongst actors in a partnership and would cost the region its development. However, it is worth mentioning here that in one of the cases the core actors refused to talk to me because of my persuasive nature without giving any proper reasons, feeling that they were being interrogated. This almost ended the case study. Through the snowball method, I was able to talk to them during the second field trip. Moreover, reckless attempts to collect data on corruption were not made, as doing so might have jeopardised the fieldwork and moreover, end possibilities for any future research in the area. As mentioned in the analysis chapter, the results of the data analysis show that any restriction on disclosure of information adds to people's perception of corruption or collusion, irrespective of whether corruption actually occurred.

### ***5.7.3 Understanding the participants' constraints***

It was also important for me to consider the constraints that the actors have to work under when investigating a setting known for its corruption. The media plays an important role in such settings in forming public opinion for and against certain government decisions. It is not uncommon for the media to play a negative role in building up the image of the public- and private-sector actors that are working in that setting, sometimes also by misinterpreting their words, and misrepresenting them in public. As understood from the fieldwork, a major part of the population of this region lives in poverty, and has a sense of mistrust about the government's positive contribution to their lives. Hence, it is comparatively easier for the media to mislead them and form public opinion against such projects. However, correspondingly, those developers who are external to the region are under a lot of pressure, which makes them very cautious about making any kind of statement. Accessing data in such a situation became a major issue for me, meaning that developing trust and confidence in the research participant was extremely important. For example, while it was not possible for me to develop such trust using my personal network in the case of the national highway projects, I was able to make such connections for the state highway project. In this case, it was the concessionaire who made the approach, seemingly out of curiosity. It was then much easier for me to secure permission from the public-sector official, because I was able to approach them through this private-

sector partner. I was even allowed to voice record interviews, which was not possible in the case of the national highway projects.

Finally, it should be mentioned that the status of a project can also be considered detrimental to getting access to data. When a project is in a nascent stage of construction, it is obvious that the partnership will also be in such a stage. Moreover, in moving from the financial to the construction stage there will be a change of actors. Hence, although it is the same partnership with the same firms, different actors become involved in the different phases, so that this partnership is brand new for the engineers who have just moved on to the project. As such, they are very sensitive to their new situation and, hence, conscious about making statements to outsiders. For instance, in the case of the Hazaribagh–Ranchi Expressway, as the project was in the early stage of construction during the first fieldwork trip, core actors were unable to comment on a hypothetical situation, as problems in the partnership had not yet arisen. However, they were in a better position to comment on such issues during the second field trip, as they had already participated in the partnership for just over a year. In contrast, since the state highway projects were at an advanced stage of construction, the level of trust amongst partners was already established. As the concessionaire of the state highway project noted, ‘initially the private-sector developer has to build his client’s trust in him by satisfying him with his actions and then the trust level gets improved with time’ (Interview 08, September 2010, Jharkhand, India). For this reason, the concessionaire was much more confident about speaking openly for the project during an advanced stage of development. Moreover, he had examples to offer of when practical actions differ from what is written in the documentation. Without having such constraints, I would have approached actors more directly for data collection on a subject such as transparency. This would have given me a clearer idea about what information is available in the public forum and may be accessed by an ordinary citizen. I admit that I anticipated many problems with and took many precautions when requesting access to data, especially as I was aware of the region and its political instability.

## **5.8 Ethical considerations**

Ethical considerations were met, as permissions were obtained from the higher authorities regarding data collection for this research. Permission letters are included in Appendix H. Moreover, communities were informed about the purpose of data collection, both in writing and verbally. Sample of those letters are also included in Appendix H. As I might

be giving hope to the affected communities that their feedback would make a change to the public-sector authority's decision, it was explained to them very clearly that this was being carried out as part of a research project and that the public-sector authority would get to see the report.

## **5.9 Summary**

This chapter has discussed the epistemological and methodological approach adopted for this study. This study is based on the case study method, integrating multiple methods for data collection. This chapter also justifies the selection of cases, and discusses the methods of data collection and methods of data analysis. Finally, it discusses pre- and post-fieldwork protocols and my position in relation to other participants. The next chapter is on context and provides a detailed account of the highway development process in India and its region-specific characteristics.

## Chapter 6. The Context

*Geography does not have its own theory as a discipline, spatial activity being understood through other theories and concepts. That does not mean that space is benign. Indeed, space has powerful contextual effects upon the way in which activities are worked out in practice. In geography, Sayer argued that positivism neglected such contextual effects or tended to infer too much from spatially-led analysis in efforts to identify generalisations and causal laws.*

(Smyth and Morris, 2007: 426)

### 6.1 Introduction

As aptly outlined in the passage cited above, context plays an important role in research, and hence, demands due consideration. Positivist studies pay too much attention on generalising outcomes and developing causal laws, and hence, fail to capture underlying contextual effects. In contrast, case studies are known for producing context-dependent knowledge (Flyvbjerg, 2006). This chapter has three main sections discussing the context. The first section is on the highway planning framework in India; the second is on the fieldwork regions, and the highway network and the existing mechanism of transparency in those regions; and the third comprises a brief description of each selected project.

### 6.2 Highway planning framework

#### 6.2.1 Introduction

This section aims to present an overview of India's highway system, defining national highways and discussing national development plans providing a broader framework for highway planning. India's road network is 2.075 million miles in total length (Ministry of Road Transport and Highways (MoRTH) website).<sup>20</sup> India reports being the second largest road network in the world, despite being only the seventh largest country in the world in terms of area. As per present estimates, the road network carries nearly 65% of freight and 85% of passenger traffic (MoRTH website).<sup>1</sup> Over the past few years, the rise in car ownership has considerably increased the volume of road traffic. According to the MoRTH website, India's total network of roads can be divided into three groups: national highways, state highways and major district roads, rural roads and urban roads. Table 6.1 provides an approximate distribution of the total road stock into various categories.

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<sup>20</sup> <http://morth.nic.in/showfile.asp?lid=364> accessed 1 April 2013



Table 6.1: Division of roads into various categories

Category of road	Length in miles
Total road network	2,075,000 (approx)
National highways	40,749
State highways	80,778
Major district roads, rural roads & urban roads	1,950,000 (approx)

Source: Ministry of Road Transport and Highways (MoRTH) website <sup>21</sup>

However, the National Highways Authority of India (NHAI) uses a different categorisation for road distribution.<sup>22</sup> According to the NHAI, expressways and national highways are two different categories, while MoRTH considers them under the same category. Table 6.2 shows the distribution of different types of roads as per the NHAI.

Table 6.2: Distribution of roads based on NHAI categorisations

Category of road	Length (in miles)	Percentage
Expressways	124.27	0.006
National highways	43,836	2.14
State highways	81,958	4.00
Major district roads	290,654	14.17
Rural and other roads	1,646,633	80.30
Total length	2,050,000 (approx)	100.00

Source: NHAI website<sup>2</sup>

By definition, an expressway is a major divided highway (dual carriageway) designed for high-speed travel, having few or no intersections. However, the design criteria of an expressway vary across countries, and even across regions, depending on the planning framework. National highways are primarily long-distance roadways that connect states and economically important cities. The total length of national highways in the country at present is 25,316 miles. This comprises only 2% of the total road network, but carries over 40 per cent of the total traffic. This mismatch in the carrying capacity of national highways attracted attention for the upgrade and maintenance of national highways. Two

<sup>21</sup> <http://morth.nic.in/showfile.asp?lid=364> accessed 1 April 2013

<sup>22</sup> <http://www.nhai.org/> accessed 1 April 2013

projects selected for this study are national highway projects. One of these, Hazaribagh–Ranchi Expressway, is also named as an ‘expressway’. The second is a bridge project, which is a section of national highway network and is prioritised to improve port connectivity.

State highways connect important cities, towns, and district headquarters within states, connect those centres with national highways, and are maintained by the state government. In India, the central government and NHAI are not involved with state highways. Major district roads run within particular districts, connecting areas of production with markets, rural areas to the district headquarters and to state and national highways. Ranchi Ring Road, one of the selected projects for this study, is a state highway project. Interestingly, it is named the ‘green expressway’ by developers as it has a new alignment and runs through the whole region.

Rural and ‘other’ roads are those that connect rural areas to district roads. As the following official document states:

The access to villages within a district or between different districts is provided by Other District Roads (ODRs) and Village Roads (VRs). These roads also meet the social needs of the villagers and are also a means for transportation of agriculture produce from the villages to nearby markets. Rural connectivity is a key component of rural development and contributes significantly to generating higher agricultural incomes and productive employment opportunities besides promoting access to economic and social services. **Studies show that rural roads have a significant impact on poverty reduction as well** (my emphasis).

(Report by India Core: Roadways, online)<sup>23</sup>

Figure 6.1 shows the overall national highway network map in India, showing different categories of national highways and their spread across the country, and Figure 6.2 shows the overall highway network in the country, where only national highways are differentiated from other roads. It is noteworthy that national and state highways cannot be distinguished in terms of specific design guidelines like design speed, number of lanes, facilities and so on. These roads are designated depending on their scale of connectivity and the authority responsible for road provision and maintenance.

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<sup>23</sup> <http://www.indiacore.com/roadways.html> accessed 1 April 2013



Figure 6.1: Indian national highway network map

Source: MapsofIndia.com<sup>24</sup>

<sup>24</sup> <http://www.mapsofindia.com/driving-directions-maps/clickable-national-highway-map.html> accessed 1 April 2013



Figure 6.2: Map of India's highways

Source: Prokerala.com<sup>25</sup>

On the basis of the scale of connectivity, these different types of roads are planned and maintained by different types of organisations. For example, a national highway connects states and important cities across different states: it is a road that serves a national purpose. A state highway connects important cities located in the same state, and serves a purpose for the state. Table 6.3 below describes the authorities responsible for different categories of roads.

<sup>25</sup> <http://www.prokerala.com/maps/india/road-map-india.html> accessed 1 April 2013

Table 6.3: Authorities responsible for construction and maintenance of roads

Category of road	Authorities responsible
National highways	Central government (through the Ministry of Road Transport and Highways)
State highways and major highways	State governments, Public Works Departments (PWDs)
Rural and urban roads	Rural engineering organisations, local authorities like panchayats and municipalities

Source: Author

### 6.2.2 *Planning framework for national and state highways*

As mentioned above, highways are literally and symbolically perceived as the main arteries of the economy for a nation. This section outlines how highway planning has been prioritised in the national plan on the basis of its contribution towards a fast-growing economy. India's Five Year Plans can be considered as the planning framework for national and state highways. As already mentioned, national highways connect the capitals of each state and other important cities in India. National highways are designed to improve fast movement between important economic centres. The concept of the national highway was first introduced in the sixth Five Year Plan (1980–85). This plan identified the highway as the main trunk route of the road system in India. It was recognised that these roads account for only 5% of the road network in India, although they cater for 25–30% of the traffic.<sup>26</sup> However, the sixth Plan also recognised the need for centrally funded state roads of inter-state or economic importance and road communications in sensitive border areas.

The seventh Five Year Plan (1985–90) specifically recognised the necessity to upgrade the existing highways, both in terms of increasing the number of lanes and modernising the highway system. The role of central government was also recognised for the development of national highways (carrying one-third of all traffic) that would in turn influence the national economy. This plan also emphasised the maintenance of the existing highway system and recommended the introduction of the modern method that prioritises the maintenance of existing highways over the building of new ones.

<sup>26</sup> <http://planningcommission.nic.in/plans/planrel/fiveyr/welcome.html> accessed 1 April 2013

The eighth Five Year Plan (1992–97) was an important milestone because it introduced private-sector participation into the road planning system in India for the first time. Manmohan Singh's government adopted a policy of privatisation in 1991. Hence, there was a shift from a central planning system to an indicative planning system. In the indicative planning system, the role of the state shifts from implementer to facilitator and regulator. This system was also reflected in transportation planning in the eighth Plan: private-sector participation was introduced into the infrastructure sector where the state previously had a monopoly. Although privatisation policies were motivated partly because of reductions in public spending, the risk of excluding the poor population from a market-based supply system was recognised. Hence, the need for stronger state intervention was acknowledged in the regulation of the supply system and it was clearly stated that the market mechanism was not a supplement to planning; rather, these are complementary components (as per the eighth Five Year Plan, 1992–97). This introduced the formation of PPP models, and Build-Operate-Transfer (BOT) became the most popular form of PPP in the road sector. This model was mainly encouraged for expressway and highway projects where toll payments were seen as a feasible option. There was emphasis on the maintenance of existing roads as well. Priorities were given to the existing state highways that could require conversion to national highways in future due to traffic density and growth.

The ninth Five Year Plan (1998–2002) was earmarked by the formation of a task force on infrastructure, drawing participants from the Planning Commission, as well as government and industry representatives, in order to identify projects, with the aim of attracting investment to promote national and regional economic growth. The need for a six-lane expressway like the North–South and East–West corridors and the four-laning of national highways were envisaged under this Five Year Plan. This plan also recognised the need for major investment in the highway sector, and hence focused on new financing methods for highway development and the determination of route and technical parameters. The plan first outlined the rationale behind involving the private-sector actors in road building, disregarding the obvious reasons for keeping it under state control. It was stated that declining public-sector resources, and concern for managerial efficiency and consumer responsiveness, were the reasons for involving the private sector. There were also statutory and administrative initiatives to introduce private capital for fixed infrastructure. However, it was noted that, based on India's long-term history with debt, it might not be realistic to expect large-scale investment from the private sector, and that the

process had to be improved slowly over time with a regulative framework. The plan noticed the declining share of transport in public accounts, from 23% in the third Plan to 13% in the eighth Plan. The introduction of an additional user charge for the construction and maintenance of highways was considered as a feasible option in addition to the toll imposed by the private sector. However, the plan pointed out the need to focus also on the railway sector, in order to reduce the pressure on the highways. Tables 6.4 and 6.5 show the achievements with the national highways, and achievements during the ninth and tenth Five Year Plans.

Table 6.4: Achievements on national highways

Period	Total length* (miles)	Widening to two lanes (miles)	Widening to four lanes (miles)	Strengthening of road surface (miles)	Major bridges (no.)
1947–1969	14,913	8,699**	0	0	169
1969–1990	20,886	9,942	166	5,592	302
1990–August 2001	36,109	2,148	793	4,350	87
Total		20,789	959	9,942	558

\*Length at the end of the period

\*\*Includes a length of 3,728 miles which were already two-lane at the time of designation as national highways

Source: Eleventh Five Year Plan (Volume III: 290)

Table 6.5: Targets/achievements during the ninth Plan

Sr. no.	Scheme Normal NH works	Unit	Ninth Plan Target (1997–2002)	Ninth Plan Achievements (1997–2002)
1	Widening to two lanes	miles	1113	1213
2	Widening to four lanes	miles	587	495
3	Strengthening weak lanes	miles	1890	2181
4	Bypasses	no.	59	30
5	Major/minor bridges including ROBs	no.	633	442

Source: Tenth Five Year Plan (Volume II: 948)<sup>27</sup>

In the tenth Five Year Plan (2002–07), top priority was given to national highways in order to compete with other developing nations at the international level. The Golden Quadrilateral (GQ) and North–South and East–West corridor were considered important projects in this regard. However, stress was placed on designing new expressways for commercially viable areas. It was recommended that MoRTH should work with the

<sup>27</sup> <http://planningcommission.nic.in/plans/planrel/fiveyr/welcome.html> accessed on 1 June 2013

Ministries of Mining and Tourism respectively, in order to identify important mining centres and world heritage sites, and connect them to the highways system.

The NHDP would involve an investment of Rs. 54,000 crore [USD 8.64 billion] and the Government has made arrangements to ensure availability of funds through cess [tax] on petrol and diesel, multilateral funding, normal budgetary allocations and market borrowing.

(Tenth Five Year Plan, Volume II: 949)

Prior to the tenth Five Year Plan, the National Highway Development Project (NHDP) was particularly focused on the GQ project and the North–South and East–West corridors. While the funding of the GQ was arranged through cess (tax) on petrol and diesel, multilateral funding, normal budgetary allocations and market borrowing, for the North–South and East–West corridors, it was achieved through additional cess (tax) on petrol and diesel, road tolls, market borrowing, and partly through BOT (toll and annuity funding). However, the uncertainty of future toll receipts made the BOT annuity scheme more popular, as this scheme ensured guaranteed annuity payments to investors by NHAI. As per the tenth Plan, there is a need to examine the reasons for poor investor response, assessment of investor risks in BOT projects and measures to make earnings from tolls more predictable (tenth Five Year Plan, 2002–07). Hence, it was important for both the central and state governments to generate future business opportunities for private-sector actors through the development of a list of bankable projects, in order to make the road-delivery sector attractive for them. Table 6.6 shows the status of national highways as of July 2002, as laid out in the tenth Five Year Plan.

Table 6.6: Reviewing the status of national highways as laid out in the tenth Plan

Project	Length in miles	Already four-laned	Under implementation	Yet to be awarded
Golden Quadrilateral	3633	720*	2828	85
North–South & East–West	4536	480*	444	3611
Port connectivity	226	35	70	121
Others	406	64	132	210
Total	8799	1299*	3474	4026

\*Includes a common stretch of 130 miles

Source: Eleventh Five Year Plan (Volume III: 292)

The tenth Plan gives special attention to road maintenance. Since poor road maintenance has been one of the main reasons for inefficiency in the road sector, the government has looked for alternative ways of funding maintenance. It was recognised that weak



accountability and poor monitoring were also amongst the top reasons for poor road maintenance besides a lack of financial resources. Hence, private-sector participation was encouraged as an alternative approach, with some successful examples from Bhopal and Dewas (tenth Plan, 2002–07). Thus, the private sector's accountability and hence efficiency promoted the use of PPP for road maintenance. This whole discussion about the design, construction and maintenance of roads, in particular highways (where a toll charge is acceptable) was supportive of introducing the BOT for the road sector. While the funding of the GQ and the North–South and East–West corridors was mainly dependent on additional forms of taxes and external funding, the important and newer commercially viable connections of the mining and tourist centres to the highway were mainly dependent on BOT. The GQ passes through the region of Jharkhand, which is the main fieldwork region for this study and is rich in minerals and forests. The National Highways Act 1956 was amended in June 1995 in order to enable the legal framework to involve the private sector in highway construction and maintenance. The assumption was that the states would compete with each other to attract the private sector to their own region, in order to increase the rate of road building and economic growth.

Exploring the reasons behind the shortfall in meeting NHDP targets, the eleventh Plan (2007–12) identified factors such as delays in land acquisition, in getting environmental and forest clearance, and in acquiring clearance from the railway authority for roads over bridges; rehabilitation of affected communities; local law and order problems; and poor performance. To remove the deficiencies in existing national highways, the necessity of greater attention to the construction of missing links and bridges, rehabilitation and reconstruction of weak/dilapidated bridges for traffic safety was identified.

The eleventh Plan first outlined the necessity of mainstreaming PPP, acknowledging that BOT had already become an important form of PPP to deliver roads, especially for NHDP highway projects. However, projects were being delayed due to the complicated and unfamiliar procedures of BOT. In order to overcome this difficulty, a Model Concessionaire Agreement was prepared by the PPP team in India's Department of Economic Affairs for projects adopting the BOT form. This standard document would guide the private-sector concessionaires through the partnership formation process.

The preceding descriptive account of national Five Year Plans clearly shows two aspects: firstly, how national and state highway development has been prioritised in the national Five Year Plans in order to contribute towards the economic development of the nation; and secondly, how and why the nation slowly adopted private-sector participation in its

infrastructure provision, supported by its economic reforms, and how such models were mainstreamed over time.

### **6.3 National highway planning**

#### ***6.3.1 Planning authorities of national highways***

As discussed above, India's Five Year Plans have provided the broader planning framework for planning and designing national and state highways, in terms of their physical planning, management and funding. There are two organisations in India that are solely responsible for the development and maintenance of national highways: the Ministry of Road Transport and Highways (MoRTH) – a central government ministry – and the NHAI. MoRTH is responsible for the development and maintenance of national highways.

##### **6.3.1.1 Ministry of Road Transport and Highways (MoRTH)**

MoRTH, a main central government ministry, in consultation with other central ministries/departments, state governments/union territory administrations, and organisations and individuals, is entrusted with the task of formulating and administering policies for road transport, national highways and transport research with a view to increase the mobility and efficiency of the road transport system throughout the country. The ministry has two wings: the roads wing and the transport wing. The roads wing deals with the development and maintenance of national highways. Its main responsibilities are the planning, development and maintenance of national highways in the country; extending technical and financial support to state governments for the development of state roads and roads with inter-state connectivity and economic importance; evolving standard specifications for roads and bridges in the country; and serving as a repository of technical knowledge on roads and bridges.

##### **6.3.1.2 National Highways Authority of India (NHAI)**

The NHAI is the second highest authority with responsibility for national highway construction and maintenance in India. As national highways are considered the economic arteries of a nation, the NHAI is the most powerful organisation in the nation with a prioritised right to development. It was constituted by an Act of Parliament – the National Highways Authority of India Act 1988 – and came into operation in February 1995. As

discussed in Chapter 5 in relation to data collection, the NHAI has the highest authority in the disclosure of any national highway-related information, and maintains a strong bureaucracy.

### ***6.3.2 National highway planning: National Highway Development Project (NHDP)***

As mentioned in Section 6.3 on national Five Year Plans, the NHDP provides the broad umbrella for the development of national highways. This programme has a number of distinct phases, some of which are solely based upon private-sector investment. This section also shows how NHAI has become a very powerful institution in India.

#### **6.3.2.1 Phase I: Golden Quadrilateral (GQ)**

Phase I of the NHDP assures road connectivity between the four largest cities in four regions of India. This overall road network is known as the Golden Quadrilateral (GQ) and is the most prestigious road network project in India, connecting Delhi, Mumbai, Chennai and Kolkata. The government approved the four/six-laning of 4,659 miles of national highways at an estimated cost of Rs. 30,300 crore [USD 4.848 billion]. Although most of the project was carried out with external aid from the Asian Development Bank and the World Bank, around 12% was implemented through PPP using BOT toll and annuity schemes. One project of the three chosen for this study was part of NHDP Phase I and was implemented through a BOT toll model. This project was also one of the initial projects using PPP model as such.

#### **6.3.2.2 Phase II: North-South and East-West corridors**

NHDP Phase II connects the north with the south and the east with the west of the nation by road. The North–South and East–West corridors respectively connect Srinagar (the northernmost city in India) with Kanyakumari (at the southernmost corner); and Porbandar (at the westernmost corner) with Silchar (at the eastern corner). These two corridors also intersect with the GQ project and hence also connect with the central part of the country. These projects are also funded in a similar way, partly through the external aid from Asian Development Bank and World Bank, with a very small contribution from the PPP model. The government approved 4,128 miles of national highways to be widened to four/six lanes at a cost of Rs. 34,339 crore [USD 5.494 billion].

### 6.3.2.3 Phase III: Connection of phases I and II with states and economically important regions

NHDP Phase III improves the connection of phases I and II with various states and economically important regions. The uniqueness of this phase is that it mainly depends on BOT and also uses viability gap funding to cover 40% of the project costs. The government has approved the upgrade of 7,524 miles of existing national highway to two lanes with paved shoulders, or four/six lanes where traffic density is high, at an estimated cost of Rs. 80,626 crore [USD 12.9 billion]. Since state governments compete to attract the private sector to form PPPs in their regions, the statistics regarding different regions that have successfully formed PPPs are of interest. As shown in Figure 6.3, the eastern region is struggling to form PPPs, while the north-eastern region has not as yet formed any. One case from this study, located in the state of Jharkhand in the eastern region, belongs to NHDP Phase III.

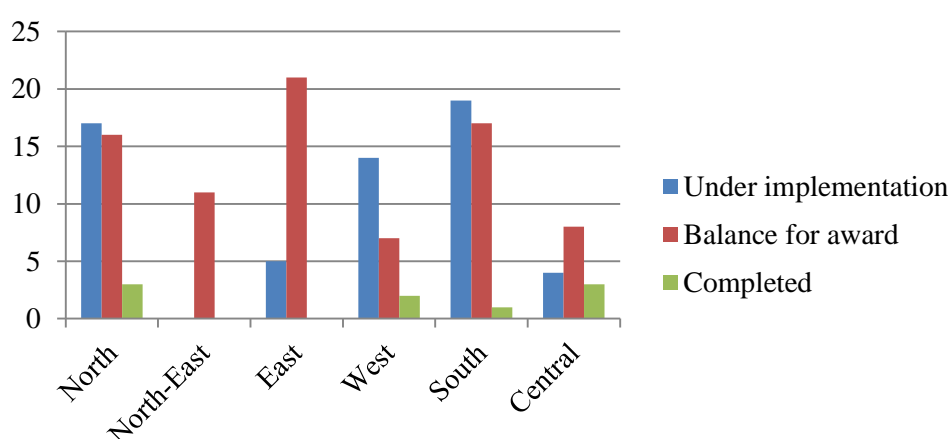


Figure 6.3: Status of infrastructure projects in different regions delivered through PPP

Source: Author

### 6.3.2.4 Phases IV-VII

NHDP phases IV to VII mainly use BOT toll and annuity models, at times, on a DBFO<sup>28</sup> basis and with or without viability gap funding (VGF). Phase IV depends on BOT; Phase V uses BOT (toll) using DBFO with 10% VGF. In DBFO, private-sector actors need to supply the upfront costs of design, construction and annual maintenance expenditure and recover the entire cost, along with the interest, from toll collections during the concession period. Phase VI uses the PPP route with BOT (toll), following a DBFO pattern with a

<sup>28</sup> Design-Build-Finance-Operation

maximum VGF of 40%. Under Phase VII, the government approved construction of 435 miles of standalone ring roads/bypasses as well as grade separators, flyovers, elevated roads, tunnels, roads over bridges, underpasses, etc. at an estimated cost of Rs. 16,680 crore [USD 2.668 billion] via the PPP route using BOT (toll) with a maximum VGF of 40%. The phasing of the highway development programme does not always indicate the use of different models, or the development of different categories of highways; it mainly presents the chronological development of highways.

#### **6.4 State highway planning**

While the need to develop state highways and to draw on the private sector for financial resources was identified in India's Five Year Plans, the form of partnerships used in the case of state highway projects sometimes varies from that used for national highways. Nevertheless, state highways have also become largely dependent on PPPs. According to the information provided by the central government PPP team, there are currently 185 state highway projects in the pipeline that depend on PPP. However, this database is incomplete, as it does not include the state highway considered for this study. State government departments generally adopt the Model Concessionaire Agreement (MCA) published by NHAI, with regional modifications as required, as a standard model to carry out the process of highway development (Interview 15, August 2011, Delhi).

For national highway projects, these partnerships are formed for each project, while NHAI remains the client. In the case of state highway projects, sometimes the state government Road Construction Department works as the client, whereas sometimes a special purpose vehicle (SPV) is formed between the state Road Construction Department and the concessionaire. Formation of this SPV is a common practice for state governments. It works as the client for the private-sector concessionaire of the PPP project and takes up the responsibility for all state highway projects in that state. As mentioned in Chapter 2, these joint-sector vehicles can be called infrastructure-PPP, based on Weihe's (2006) classification. Studies on state highway projects show that they use PPP models in a more innovative way. While the NHAI has to maintain a uniform PPP model across the country, the state governments can use models innovatively, on the basis of the need of their own region.

## 6.5 Regional distribution of highways by PPP

North-eastern and eastern regions have a lower amount of infrastructure in comparison to other regions in India (Mukhopadhyay, 2008; Anant and Singh, 2010). The public sector's insufficient financial resources was one of the reasons for the lack of infrastructure. As a solution to this problem, PPPs were encouraged for infrastructure projects, with the hope that private-sector investment could bridge the resource gap. Thus, it was expected that PPPs would be formed in poor regions and private-sector investment would help the local governing authorities to improve their infrastructure. However, a recent study has shown that this has not been the case. Comparatively well-off regions continued to attract private-sector players to form PPP partnerships, while poor regions failed to do so (Mukhopadhyay, 2011; Anant and Singh, 2010).

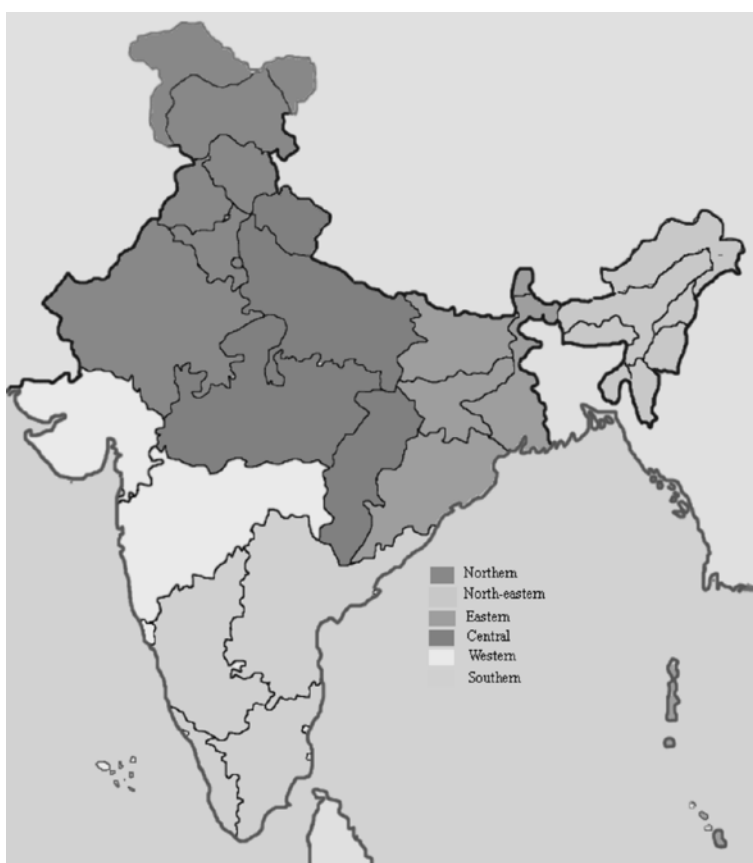


Figure 6.4: Map showing various regions in India

Source: Mukhopadhyay (2011: 48)

An intra-state analysis also shows that there are nevertheless a number of big cities in the north-eastern and eastern regions which can be considered as outliers in terms of attracting private-sector actors. In the eastern region, Kolkata as a city and hence West Bengal as a state has been the outlier. On the other hand, states like Bihar and Jharkhand

have struggled to form PPPs due to a lack of interest from the side of the private-sector actors.

## **6.6 Fieldwork regions**

### ***6.6.1 Region 1: State of Jharkhand***

The state of Jharkhand is located in the eastern region of India, as shown in Figure 6.5. As the website of Jharkhand state shows, this region used to be part of Bihar and seceded from Bihar to become a separate state in 2000.<sup>29</sup> It has come under presidential rule many times and has not yet formed a state government. It is considered to be a zone in a process of political transition, a status that has had implications for its development.

As per the 2001 census, the geographical area of this state is 7.97 million ha. It is rich in forests and minerals: while 29% of its landmass is forested, it is also the location of approximately 30% of India's total mineral supplies. As the official state website shows, this region has the largest industries based on these two natural resources in India.<sup>30</sup> Interestingly, there are many national highways that pass through this region. But, as mentioned by many interviewees during the fieldwork, the national highway network is congested in this region as they improve the connectivity of the largest industries in India (located in this region) with the rest of the country in order to transport raw materials and finished products (Interview 09, September 2010, Jharkhand, India).

As explored from information from a local contact during fieldwork, there is a significant gap between rich and poor in the region. Whereas a significant percentage of population of the region is tribal, many in the industrial sector enjoy a much higher economic status. As mentioned by a key informant, the region, due to its mineral and forestry resources, has a history of exploitation by outsiders, while the tribal population – the indigenous population of this region – fight against such exploitation. As evident from one of the Detail Project Reports and the state website, tribal populations were found in this region in the Neolithic era, and go back a long way in its history (Document 02: Detail Project Report, Hazaribagh–Ranchi Expressway, accessed in August 2010, Jharkhand, India).<sup>31</sup> As understood from the same document, because of the dense forests, the region was inaccessible to large sections of the population for a prolonged period of time. In addition, the indigenous population has always associated the development of infrastructure,

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<sup>29</sup> <http://www.jharkhand.gov.in/> accessed 1 June 2013

<sup>30</sup> [http://jharkhand.gov.in/AboutState\\_fr.html](http://jharkhand.gov.in/AboutState_fr.html) accessed 1 June 2013

<sup>31</sup> [http://jharkhand.gov.in/AboutState\\_fr.html](http://jharkhand.gov.in/AboutState_fr.html) accessed 1 June 2013

especially road and railways, with the exportation of its rich resources to places outside the region. Moreover, it should be noted that this state originally sat within Bihar, and seceded from the influence of the northern part of Bihar, which was exploiting its resources, with an aim of creating an independent tribal state. A particular significance is attached to this idea of a 'tribal state'. It is not just a state for the tribal population, but also a state that encourages a tribal way of life.<sup>32</sup>



Figure 6.5: The state of Jharkhand

Source: Wikimedia<sup>33</sup>

Transparency of infrastructure development would ideally include the affected (tribal) population in the decision-making process. Hence, transparency would be considered to be met in the case where the affected population's concern is also taken into account during project development. This point will be followed up in Chapter 8 while discussing transparency during land acquisition.

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<sup>32</sup> <http://www.india-in-your-home.com/jharkhand.html> accessed 1 June 2013

<sup>33</sup> [http://upload.wikimedia.org/wikipedia/commons/thumb/7/79/India\\_Jharkhand\\_locator\\_map.svg/543px-India\\_Jharkhand\\_locator\\_map.svg.png](http://upload.wikimedia.org/wikipedia/commons/thumb/7/79/India_Jharkhand_locator_map.svg/543px-India_Jharkhand_locator_map.svg.png) accessed 1 April 2013.



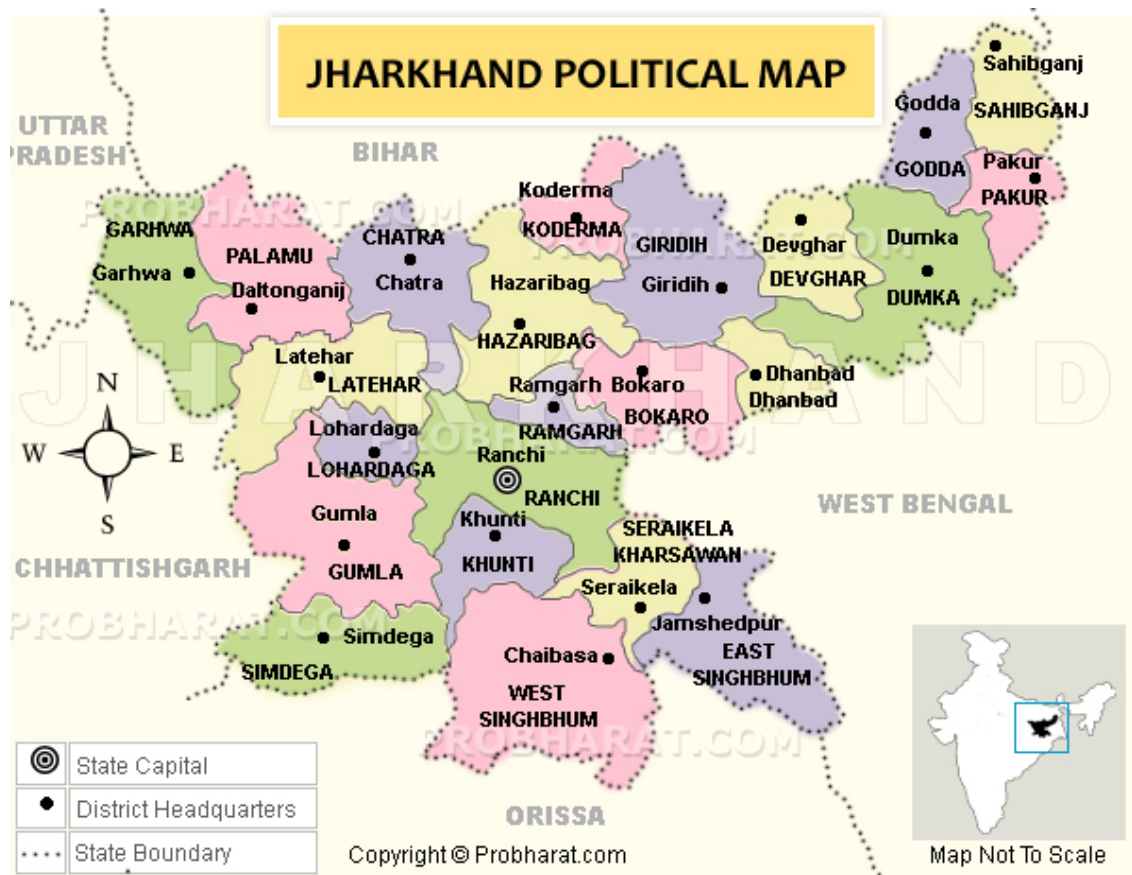


Figure 6.6: Districts in Jharkhand

Source: [Mapsofindia.com](http://Mapsofindia.com)<sup>34</sup>

#### 6.6.1.1 Highway projects in Jharkhand

Figure 6.6 shows the political map of Jharkhand. The state of Jharkhand, being rich in mineral and forestry, is home to the headquarters of many important industries. Hence, many national highways serving those industries of national importance pass through this region. Figure 6.7 shows the overall road network. However, it is to be noted that although there are many national highways passing through this region, they cater more for the national interest than the regional one. Hence, these highways do not actually indicate regional development.

<sup>34</sup> <http://www.probharat.com/india/states/maps/jharkhand-political-map.php> accessed 1 April 2013

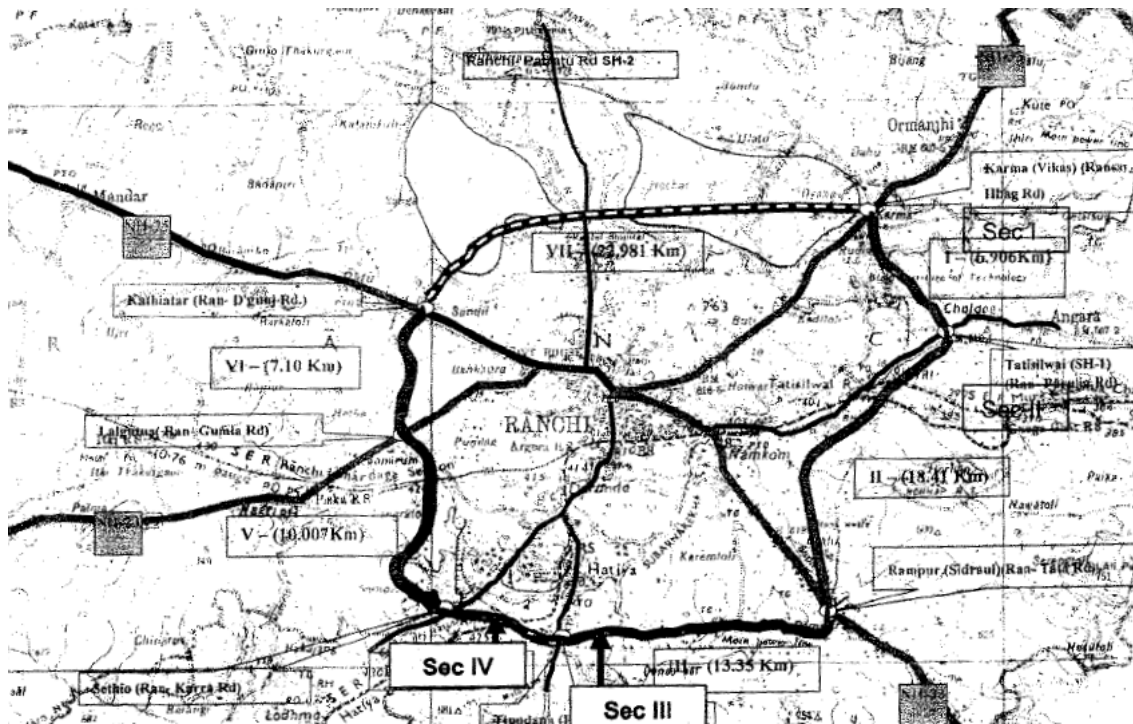


Figure 6.7: Road network in Jharkhand

Source: Detail Project Report, Ranchi Ring Road

While both central and state governments have played a major role in planning highways, they have also been supported by existing industries that are making a contribution towards the region's development. Although this region is on a pathway towards development, the continuing existence of its tribal villages is under threat. This strong conflict of interest has contributed towards its politically vulnerable status.

### 6.6.2 Region 2: West Bengal

West Bengal is a state located in the eastern region of India. This state shares the eastern boundary of India with Bangladesh. At the time of the partition of India in 1947, the region of Bengal was divided into two parts, which came to be known as West Bengal and East Bengal; the latter is now known as Bangladesh. Kolkata, the third largest city in India, and the pre-eminent city of the Eastern region, is located in this state. Kolkata used to be the British capital of India (before it was moved to Delhi) and was developed as a city-port, being located close to the Bay of Bengal.



Figure 6.8: Location of West Bengal in India

Source: updateox.com<sup>35</sup>

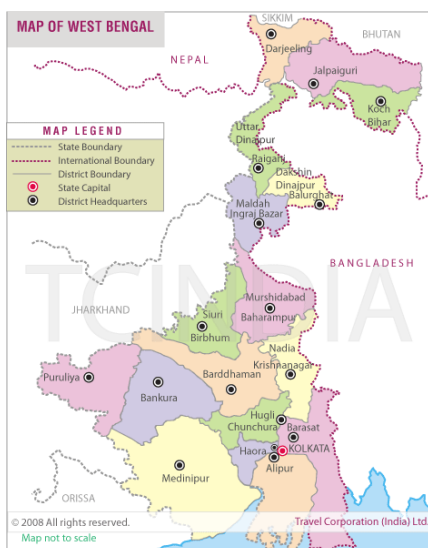


Figure 6.9: The state of West Bengal

Source: TC India<sup>36</sup>

### 6.6.2.1 Highway projects in West Bengal

In terms of development and infrastructure, the state of West Bengal, and in particular the Kolkata Metropolitan Area (KMA), has made substantial progress. Commercially, this area has dominated the whole eastern region in terms of attracting investment and developing infrastructure, which eventually contribute towards economic development. Figure 6.10 shows the major road network in the state of West Bengal.

<sup>35</sup> <http://updateox.com/wp-content/uploads/2011/04/west-bengal-India.png> accessed 1 June 2013

<sup>36</sup> <http://www.tcindia.com/maps/images/West-bengal.gif> accessed 1 June 2013



Figure 6.10: Road network map of West Bengal

Source: IndiamapAtlas.com<sup>37</sup>

## 6.7 Reactive measures of transparency and grievances addressing mechanisms

This section describes the Right to Information (RTI) Act, the Lokayukta and the Citizen Charter as the reactive measures to operationalise transparency and address any corrupt behaviour in the government. The RTI Act was enacted in India in 2005. The Lokayukta is a quasi-judicial body in every state with an aim to access justice, transparency and accountability.

### 6.7.1 Right to Information Act

As briefly discussed in Chapter 3, the RTI Act in India was enacted in 2005. It empowers citizens of India to demand information from the public sector regarding their way of working. There is an online portal through which information can be requested with

<sup>37</sup> <http://www.indiamapAtlas.com/west-bengal/national-highways/images/west-bengal-national-highway-map.jpg> accessed 1 April 2013

minimal payment. One is given a registration number and can trace the status of the request online. In an advanced stage of this research, information was requested through this portal, as already discussed in the previous chapter. However, it must be remembered that the RTI Act is a reactive mechanism to operationalise transparency. Moreover, as experienced from the fieldwork and confirmed by theories in Chapter 3, there are structural barriers to the disclosure of information. Affected communities with low literacy rates are not even aware of the existence of the Act. To make proper use of such a mechanism, public awareness about the RTI Act must be improved.

### **6.7.2 Lokayukta and Citizen Charter**

The Lokayukta – an anti-corruption ombudsman body – is an ongoing effort to deliver just, transparent and accountable government. It looks into the complaints of corruption victims upon written complaint. It is a quasi-judicial institution existing in each state in India. As we will see in the following section, the cases for this research are located in two states: West Bengal and Jharkhand. The West Bengal Lokayukta Act was enacted in 2003. However, as we did not use the project located in West Bengal for the analysis of data on Phase II, this Act is not central to the analysis. The Jharkhand Lokayukta Act was enacted in 2001. The first Lokayukta started his period of office in 2004 and was discharged in 2009. The following Lokayukta took office from January 2011. As the fieldwork for this research was carried out in 2010 and 2011, the affected communities were not aware of this reactive mechanism, which would have enabled them to complain about any administrative wrongdoing or corruption. Moreover, the website<sup>38</sup> itself acknowledges that people in Jharkhand are not aware of the existence of the Lokayukta and his role. There is need of public awareness program to improve awareness about the Lokayukta. Hence, the affected communities or even the gatekeepers did not mention anything about the Lokayukta during the fieldwork. I received a similar impression about the RTI Act, as the communities from the Mandu area affected by the Hazaribagh–Ranchi Expressway widening project were not even aware of the Act's existence. As we will see, it was not surprising that the affected communities did not mention this mechanism as a tool to address their grievances. However, it is important to point out that the following items are outside the scope of the Lokayukta:

- [If] it relates [to] the appointment, termination, salary or service condition etc. of the public servant or otherwise specifically barred; or

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<sup>38</sup> <http://lokyuktajharkhand.nic.in/> accessed on 26 April 2014

- The complainant has or had any remedy by way of proceedings before any tribunal or court of law:

Provided that the Lokayukta may conduct an investigation notwithstanding that the complainant had or has such remedy if he is satisfied that such person could not or cannot for sufficient cause have recourse to such remedy; or

- The Supreme Court or the High Court has issued any direction, order or writ under Article 32 or Article 226 of the Constitution of India in respect of the matter mentioned in the complaint under investigation.

(Lokayuta, Jharkand website)<sup>39</sup>

These tools are reactive measures to operationalise transparency to address blame and grievances. While such tools are also important components of transparency, as already discussed in Chapters 1 and 4, policymakers are raising their voices for proactive measures of disclosure of information in PPP projects, in order to reduce the cost burden of accessing information. Chapter 8, on project design and land development, discusses structured and unstructured proactive measures of transparency to disclose information on upcoming projects and its impact on affected populations' livelihood as a part of the data. This study argues for such proactive measures of transparency through PPP.

## **6.8 Land acquisition process**

This section describes the land development process both for national and state highways in the context of India. Land development for highway construction includes identification of land, land acquisition, land preparation for development, change of land title to the concerned public-sector authority and hand over of land to the private-sector actor for construction. Land required for national highways are acquired under the National Highways Act 1956. Land required for state highways are acquired under the Land Acquisition Act 1894. Both national and state highways are considered public purpose, and government justifies the acquisition of required land on that ground. As mentioned in the National Highways Act 1956:

Where the Central Government is satisfied that for a public purpose any land is required for the building, maintenance, management or operation of a national highway or part thereof, it may, by notification in the Official Gazette, declare its intention to acquire such land.

(National Highways Act, 1956: 2)

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<sup>39</sup> <http://lokayuktajharkhand.nic.in/summary.html> accessed 26 April 2014

In the National Highways Act 1956, the overall land acquisition process includes sections on power to acquire land, power to enter for surveys, hearing of objections, declaration of acquisition, power to take possession, right to enter the land where it has vested in the central government, determination of amount payable as compensation, and deposit and payment of amount. Land for state highways are acquired by state governments under the Land Acquisition Act 1894. Figure 6.11 below displays the land acquisition process under that Act.

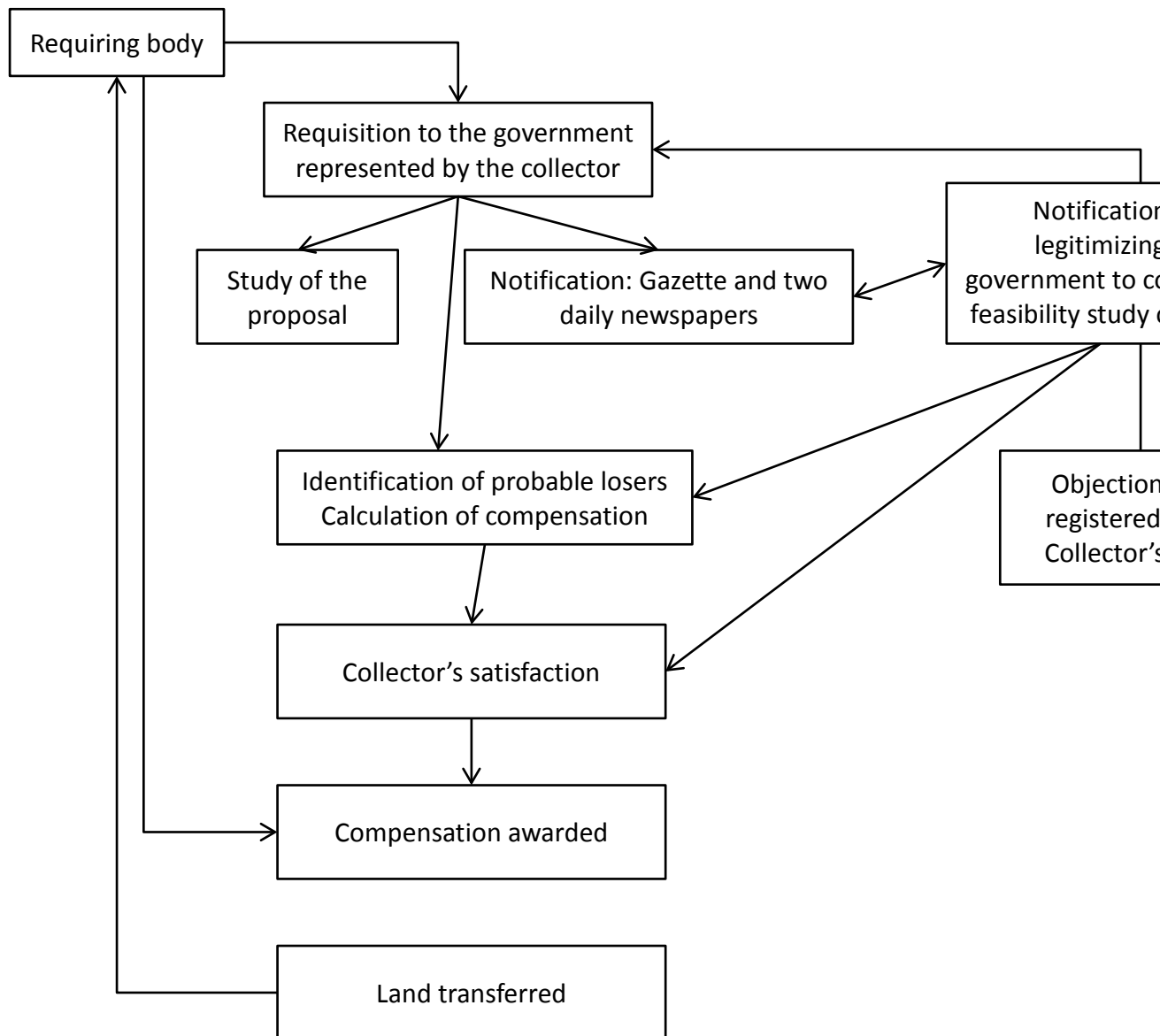


Figure 6.11: Land acquisition process under the Land Acquisition Act 1894

Source: Chakrabarti (2008) as cited by Raghuram *et al.* (2009)

Hence, as understood from the above-mentioned documents, in the whole process of land development, land is identified for the project, and this is notified in the public gazette; the potential affected population is identified, compensation is calculated and awarded;

the land is transferred to the public sector, is evacuated and levelled for construction, and finally handed over to the private-sector actors. In this whole process, the phases of land identification, disclosure of information about the impact of a project on the potential affected population through notification in the gazette, and the calculation and award of compensation, are matters of concern in relation to the issue of transparency towards the affected population.

In relation to transparency, there is very little guidance available on how transparency should be represented in this phase from the government's side. However, as many international development organisations such as the World Bank identify, large-scale developments promoting economic development come at the cost of local communities' interests (Cernea, 1988). They term this: 'involuntary resettlement in development projects'. As the policy document states:

... in as much as these projects, in addition to their positive contribution to national interests, have also an unavoidable negative impact, means of reconciling the two sets of conflicting interests need to be found. Firm measures must be taken to protect the lives, welfare, culture and human rights of those displaced, as well as to reduce/redress the loss of economic potential incurred by the local or regional economy.

(Cernea, 1988: 4)

Hence, following the guidelines of international organisations, the process of resettlement must respect the 'lives, welfare, culture and human rights' of those affected. This chapter reflects on these elements in the purpose of transparency section. Also, as understood from the empirical data and as will be described, the main concern of government is to disclose information on the exact impact of the project on those affected and their satisfaction with the compensation offered.

As understood from the above, the ideal process of land development in practice should include the identification of land by both public- and private-sector project developers; notification to acquire the land, acquisition, and preparation of land by the state government land survey department; handover of developed land to the public-sector authority concerned; and finally, handover of developed land from the public-sector partner to the private-sector authority for construction. This is due to the fact that the public-sector partner for road construction (such as NHAI or the state government Road Construction Department) does not have the direct authority to acquire land. However, as interviews with core private-sector actors reveal, private-sector partners actually cooperate with public-sector authorities and even state government land survey



departments to expedite the process, especially in case of state highways, as otherwise the construction gets delayed with the risk of private-sector partner losing money.

### **6.9 Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013**

Land acquisition is a critical risk in any development project, as discussed in Chapter 2. However, it is inevitable for public purposes such as road construction. Hence, the only way of compensating the affected communities is to help them with rehabilitation and resettlement through compensation. Every state in India has such an Act to deal with this. There was a recent update to the situation due to the national Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act (RTFCT) 2013. This Act came into force after the fieldwork was undertaken. It introduces certain clauses that will definitely improve the land acquisition process. Firstly, it clearly acknowledges who must be considered ‘affected parties’ and includes those who may not own or occupy the land, but whose economic base is affected by land acquisition. Secondly, together with the Environmental Impact Assessment, it also introduces a mandatory Social Impact Assessment component to be prepared in consultation with affected parties and to be considered during the process of decision-making on land acquisition. Moreover, there is a six-month timeline to prepare the report, it must be available in public forum, and the Act limits the validity of such a Social Impact Assessment to two years only. Thirdly, it assures prior consent of at least 70% of affected communities before actually acquiring land for infrastructure-PPP projects. Fourthly, this Act gives priority to food security over infrastructure development, which empowers the Ministry of Agriculture. Undoubtedly, this Act would improve the situation. However, it will still be interesting to see how these clauses are interpreted in practice.

### **6.10 Description of cases**

The following is a brief description of projects considered for this study. As shown in Figure 6.12, two projects were chosen from the region of Jharkhand.

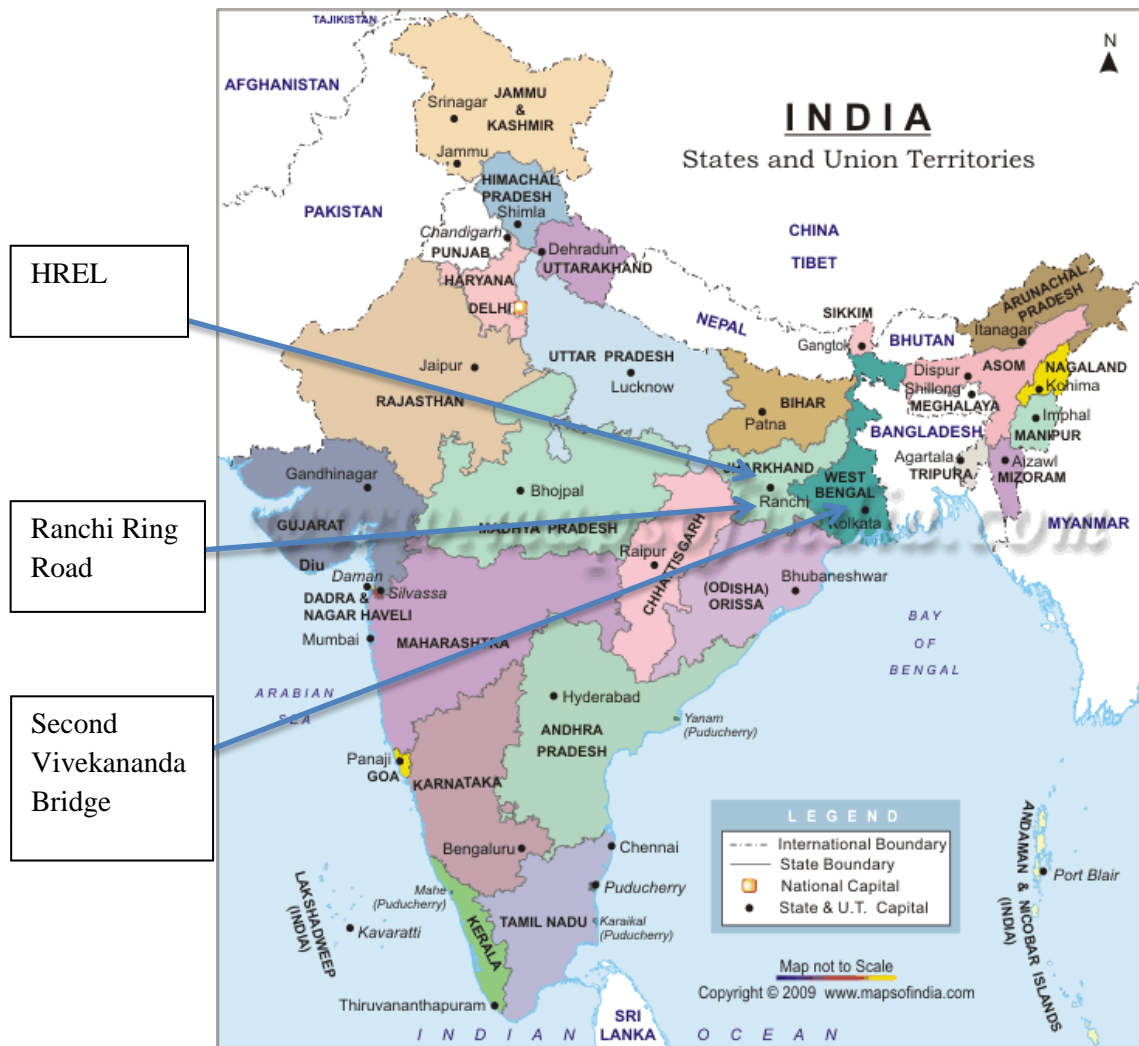


Figure 6.12: Map of India showing case locations

Source: Indiamapatlas.com, adapted by author<sup>40</sup>

### 6.10.1 Projects from Jharkhand region

#### 6.10.1.1 Project 1: The Hazaribagh–Ranchi Expressway

The first project considered for case study is a national highway project, under Phase III of NHDP, located in the state of Jharkhand. This project is being delivered through BOT (annuity) by an SPV with the name of Hazaribagh–Ranchi Expressway Ltd (HREL). This project was in its initial stage of construction at the time of the fieldwork for this study.

This project was considered as a potential case study due to its location, character and status. Hazaribagh–Ranchi Expressway is located in the state of Jharkhand, where the

<sup>40</sup> <http://www.indiamapatlas.com/west-bengal/national-highways/images/west-bengal-national-highway-map.jpg> accessed 1 April 2013

government has not yet been very successful in forming PPPs. This project would be likely to prove helpful in exploring the barriers of forming PPPs in this region. Because this is a national highway project under Phase III of NHDP, it would be possible to generalise the experiences from this project regarding the formation of PPPs for other national highway projects in this region or other similar regions. Finally, this project was at the construction stage during the fieldwork. As this study focuses on the construction stage, it was possible to access data.

Three-quarters of the population of the state of Jharkhand live in the rural areas and form the state's tribal population. These regional statistics suggest that it will be difficult to commercialise projects in the region. Since this region is rich with minerals and forests, it has the potential for future growth, and industries have been developed based on these two natural resources. As the planners conceptualise it, this road does not have any historical importance like the National Highway-2 or Grand Trunk roads, nor does it have any commercial importance at the present time. However, the new transport corridor is anticipated to have the effect of bringing the backward regions of the state into the mainstream. According to the DPR of the project, this project will facilitate 'cultural exchange, social equality, and everlasting impact on economy' (Document 02: Detail Project Report, Hazaribagh–Ranchi Expressway, accessed in August 2010, Jharkhand, India). In addition, this region is a zone under political transition, while the political parties try to form a government. There have been seven changes of government over the last two years. In this political transition period, since the duration of each government is uncertain, the population has developed a sense of mistrust in the government with regard to any long-term political/developmental goals.

As seen from the DPR, the main urban centres that exist along the present road are Hazaribagh, Kujju, Ramgarh and Ranchi. Physically, the road traverses rolling and mountainous terrain. This project is expected to contribute towards the economic development of the region, which is thought, in turn, to be likely to improve the quality of life for the indigenous population. In the region of Jharkhand, industrial growth is based on mineral reserves and rich forests. This road project is expected to contribute towards the modernisation of the region. As mentioned in the project report, this project is expected to produce the social value that road projects are thought to contribute in addition to their commercial value. The project's area of influence is the whole of the state of Jharkhand. The map in Figure 6.13 below shows the NHAI's project in the state of Jharkhand. The sections that form part of the GQ, the road outlined in red, already

exist; while the NHDP Phase III roads, outlined in blue, are under construction, and the Phase IV roads, outlined in green, are future potential projects. Amongst the NHDP Phase III projects, the central one, the Hazaribagh–Ranchi expressway, is an extension and upgrading project, and in the initial stages of construction; Barhi–Hazaribagh (the northern one), is at the stage of financial closure; and the Ranchi–Jamshedpur project (the southern one), is in the process of partnership formation. Because only the Hazaribagh–Ranchi Expressway of these three projects was under construction, this was the project chosen for consideration as one of the case studies.

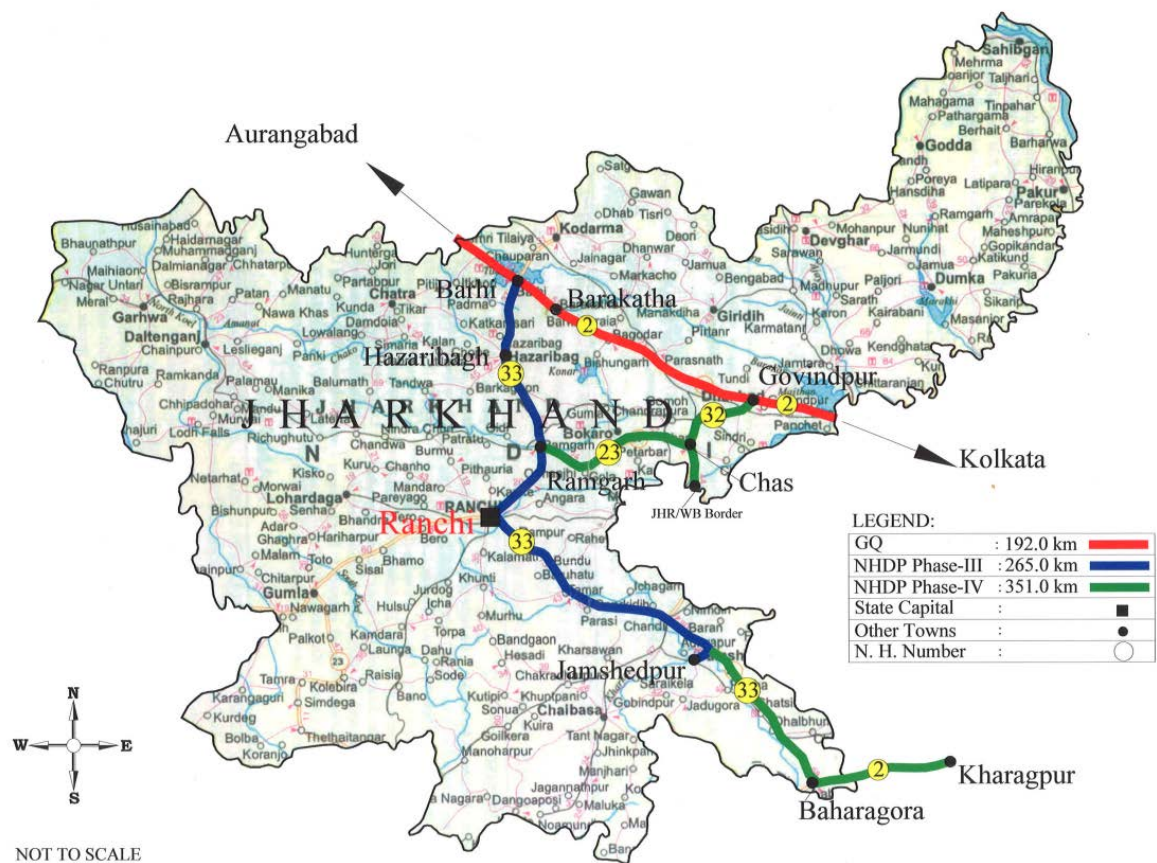


Figure 6.13: NHAI's projects in the state of Jharkhand

Source: NHAI, 2010

The Hazaribagh–Ranchi Expressway project has adopted the Model Concessionaire Agreement (MCA) for BOT annuity projects as published by NHAI. The contract period for this project is 18 years. As described in the state government minutes, national highway projects are considered to be top priority and prestigious projects for the state. Hence, the state government is especially concerned to provide all manner of assistance in order to facilitate the construction of such projects.

As experienced through the fieldwork, there is a tension between the rural population and the core industrialists promoting development in the region. The intrusion of industrialisation into the region is seen as a threat to the existence of the tribal population and their ability to co-exist with the region's natural resources. This region is known as one of the corrupt regions in India. While this study is not particularly focused on forms of corruption such as bribery, there is a need to explore the wider population's expectations of such highway projects and the real impact such projects make on the population through PPP models. A situation where the wider population's expectations exceed the reality would underline an absence of transparency in the planning process in that region. Such tension between the local communities and the wider population was evident from the case of the Ramgarh bypass. This case is briefly described here, and is also referred to for analysis in Chapter 8 to discuss stakeholder involvement. The Ramgarh bypass is a proposed bypass for the Hazaribagh–Ranchi Expressway widening project to pass through a village near an area known as Ramgarh. This was an alternative alignment of the road, actually widening the existing road in order to avoid demolition of the dense urban area along the existing two-way road.

As one of the key informants from the affected community mentions, during the preparation of the DPR, the Ramgarh bypass was proposed as one of three alternative alignments for widening the road. At this stage, the consultants and the NHAI had contacted the state Land Revenue Department to collect ground information about land availability with a land schedule. Junior staff from this department had visited the site to undertake measurements and gather information on land availability. Although these are fertile agricultural lands throughout the year, local communities did not pay much attention at this stage, as they were informed that this was one amongst a number of alternative alignments and therefore they were not sure about the exact impact of the project on their livelihoods. Moreover, there were no plans for setting aside some time to inform the communities formally about the impact of the project at that stage (Interview 22, August 2011, Jharkhand, India).

The decision about choosing an alignment that traversed farmland was taken behind closed doors by the core public- (NHAI) and private-sector actors without any consultation with the state government or affected population. Based on the official document prepared by the core developers, this alignment was chosen because there were dense urban structures along the road at this point, and hence, road widening would have involved the demolition of structures, which would have brought with it high costs, time

delays and legal procedures for the rehabilitation of the occupants (Document 01, September 2010, Ranchi, India).

When survey staff visited the site again to finalise the final measurement of the land, the affected population came to learn about the exact impact of the project on their livelihoods. Without any time and place set aside by the developers where they could express their concerns, they reacted violently against the survey staff who brought news of the project development. Subsequently, upon receiving an official order to evacuate the land, they formed a committee called '*jameen banchao samitee*' (the 'Save the Land committee'). This committee protested against the acquisition of local land and took out a lawsuit against the NHAI, firstly at the state level, and then going to Delhi, at the central government level. Their main argument was that the road alignment should be offset by 500m so that it passed through infertile land, where landowners would happily cooperate in such land acquisition (Interview 32, August 2011, Ramgarh, Jharkhand, India).

However, the 'Save the Land committee' lost their case, based on two reasons. Firstly, this project was of national importance, meaning that the local community's interest could be overridden. Secondly, the committee was told that it was too late to alter the design, as this would affect the geometry of the road. Hence, although it was pointed out that this was delayed feedback from the justice point of view, it broke the community's trust in the justice system, as feedback was not solicited in advance, so that there was no time to incorporate it in the decision about the road position. This case is evidence of the tension between project developers and local communities who are not always the beneficiaries of such modernised projects.

#### **6.10.1.2 Project 2: The Ranchi Ring Road**

The Ranchi Ring Road is a state highway project located in the same region as the Hazaribagh–Ranchi Expressway – the state of Jharkhand. The Ranchi Ring Road was only recently declared to be a state highway project, up to which point it had been designated as a greenfield project. Both projects are being delivered through BOT (annuity) and are at an advanced stage of construction. Although these projects are also located in the same region, and the same private-sector company is the concessionaire for all three projects, there are differences between the projects in terms of the structure of partnership and the power relationships amongst the actors.

It should be noted at this stage that the structure of partnership is different for national highway and state highway projects, at least in this case. While the NHAI is the public-sector client in a national highway project partnership and forms an SPV with a private-sector concessionaire in order to deliver the road, things are different in the case of these two state highway projects. Here, the public-sector partner is the Road Construction Department of the state of Jharkhand. It forms an SPV, the Jharkhand Accelerated Road Development Company (JARDCL), with a private-sector company, Infrastructure Leasing & Financial Services (IL&FS) Limited, in order to facilitate road construction projects. However, the JARDCL does not directly deliver roads. It forms a partnership with private-sector companies (in these two projects again with IL&FS) through a bidding process to deliver the road. So in this case, JARDCL serves as the client rather than the state Road Construction Department and the private-sector company is also part of the client group. If nothing else, this undoubtedly makes the power relationship amongst partners different from what would be found in a national highway project.

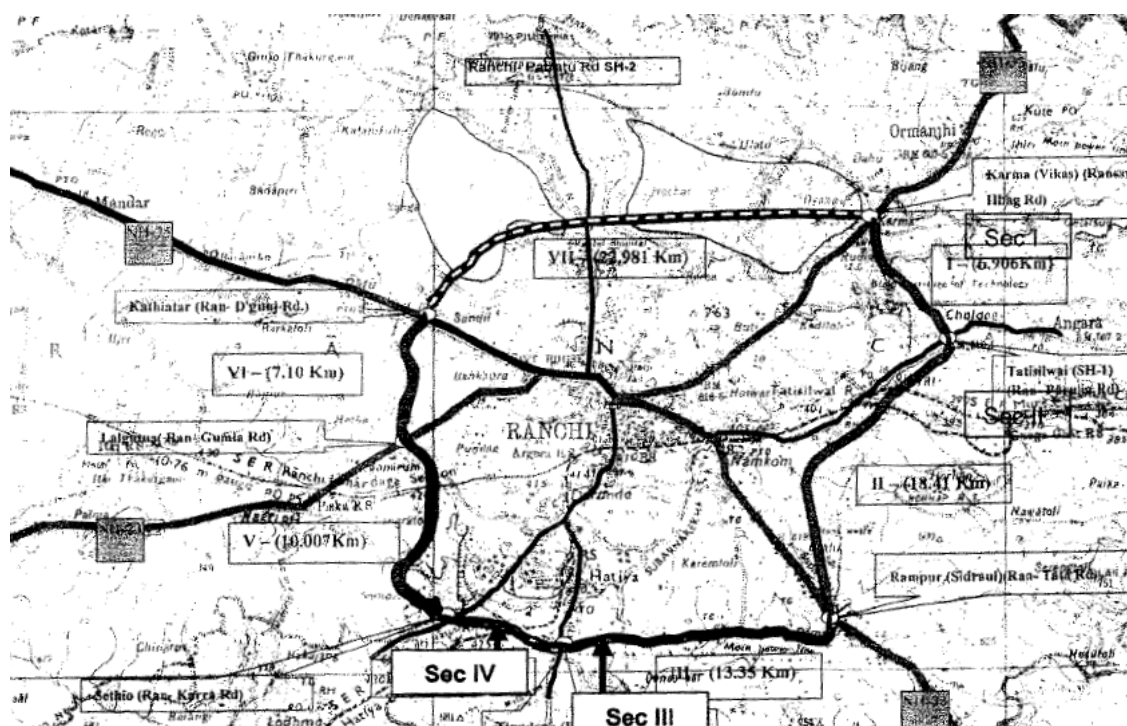


Figure 6.14: Outline of the Ranchi Ring Road

Source: Detail Project Report, Ranchi Ring Road

Jharkhand became an independent state in 2000, when it seceded from the state of Bihar, and correspondingly, Ranchi became the capital of the new state on 15 November 2000. Although this region is the richest state in India in mineral wealth, for a long period it remained in a neglected and backward condition. However, after the formation of the new state, this city became the headquarters of the Ranchi district and also of the newly

created Chhoto Nagpur division. It experienced rapid development due to a successful industrial revolution that included the exploitation of the district's vast mineral resources. This ultimately led to a growth in traffic after the formation of the state (Interview 09, September 2010, Jharkhand, India).

While the upgrading of National Highway-33 was mainly planned to improve regional connections in the state of Jharkhand, the Ranchi Ring Road was planned to relieve traffic congestion in the city of Ranchi. On one hand, it was planned to free the city of the regional traffic that had increased traffic congestion in Ranchi, especially during peak hours; on the other hand, it was planned as a bypass for regional traffic, which could now avoid entering the city in order to save on travel time. In this way, the road project makes a direct contribution to improve both local traffic and regional traffic conditions.

The Ranchi Ring Road is conceived as a greenfield project. It is 53 miles in length, with six-lane dual carriageways running through Ranchi's suburbs, providing a bypass to national highways, state highways and other roads. The ring road is a very common concept in Indian large cities. State governments take the general approach of providing a ring road to relieve traffic congestion in the inner city. Some large cities even have inner and outer ring roads. Not surprisingly, such ring roads contribute towards the outward sprawl of the city, as reactive development is not uncommon. However, as understood from informal conversation with local actors, due to a combination of the Land Ownership Act and the socio-economic condition of local population, Ranchi has not yet experienced sprawl. However, neither has it experienced planned development. This has increased traffic pressure on the city and the inner city has become very congested and undesirable to live in. This ring road was planned by the state government to alleviate traffic congestion in the city. However, it was also planned in accordance with the proposed plan for greater Ranchi. Through the several changes of government, greater Ranchi has now taken on a different shape, but the Ranchi Ring Road still remains in its original alignment and is in the process of being constructed.

### ***6.10.2 Projects from the state of West Bengal***

#### **6.10.2.1 Project 3: The Second Vivekananda Bridge**

This project is located in the environs of Kolkata in the state of West Bengal. It is a bridge project that connects two national highways, National Highway-2 and 34. It was a missing link for the GQ project in Phase I of the NHDP. This was one of the original



projects to use a BOT (toll) model in the highway sector. The project attracted the largest Foreign Direct Investment (FDI) in the eastern region. As it is one of the pilot projects of its kind using PPP, the project also received a grant from central government. It was a technical landmark project in India and won an international award.

Although the project is located in proximity to Kolkata, the prime city in the eastern region, it was considered as a suitable case study for a number of reasons. Firstly, this was one of the initial projects to use the PPP model in the highway sector, not only in the eastern part, but also in the whole of India. Since this was amongst the pilot projects, the model for the concessionaire agreement document had not been fully developed at that time. However, the current MCA was developed based on learning from this case. Thus, the concessionaires' experience in this project is very rich and can contribute towards better understanding of the system. Secondly, as this project gained an international award, it has been considered a successful landmark project. This invites exploration of whether this project was successful in all respects, and if not, why not. And thirdly, since this project has been at the operation stage for some time, it provides rich data on activities in a project's post-construction stage.

This bridge connects two cities, Kolkata and Howrah, which together form the CMA, which extends on both side of the river Ganges. This is the fourth bridge that was developed as a point of connection between Kolkata and Howrah. The first, Vivekananda Setu, was developed in 1931; the second, Rabindra Setu, in 1943; and the third one, Vidyasagar Setu, in 1992. This bridge has been developed parallel to Vivekananda Setu, in close vicinity to the existing bridge (only 50m downstream of it). As shown in the following two maps, this bridge serves as a missing link between national highways on both sides of the river, National Highway-2/6 on the western bank and National Highway-34/35 on the eastern bank. In addition, this bridge was also a missing link between two major traffic corridors on either side of the river, namely the Grand Trunk Road (GT road) on the western side and Barrackpore Trunk Road (BT road) on the eastern side. The western bank corridors will be linked through the western approach of the proposed facility and through about 1km of National Highway-2 to its meeting point with National Highway-6. The eastern bank corridors will be serviced through the Belgharia Expressway, which one of the eastern approaches of the proposed crossing is planned to join, as well as the Public Works Department (PWD) road connected to the bridge with a suitable approach system. The PWD road, in turn, is linked to Barrackpore Trunk Road. However, in both cases, this bridge was only a part of the larger network, not the whole

missing link. This bridge was developed parallel to an existing bridge, Vivekananda Setu, as the latter was no longer capable of carrying heavy traffic. There were other highway projects, local roads (shown as PWD roads on the map) that completed the missing link. Since the main objective of this bridge development was to complete the link, it was essential to have all other road projects in place on time in order to gain an overall benefit from the project.

The unity of the overall project is reflected even in the economic analysis carried out for it. The economic analysis was applied to the whole system, considering the PWD road connections and Belgharia Expressway connection, existing and proposed bridges, as an integral part of the project.

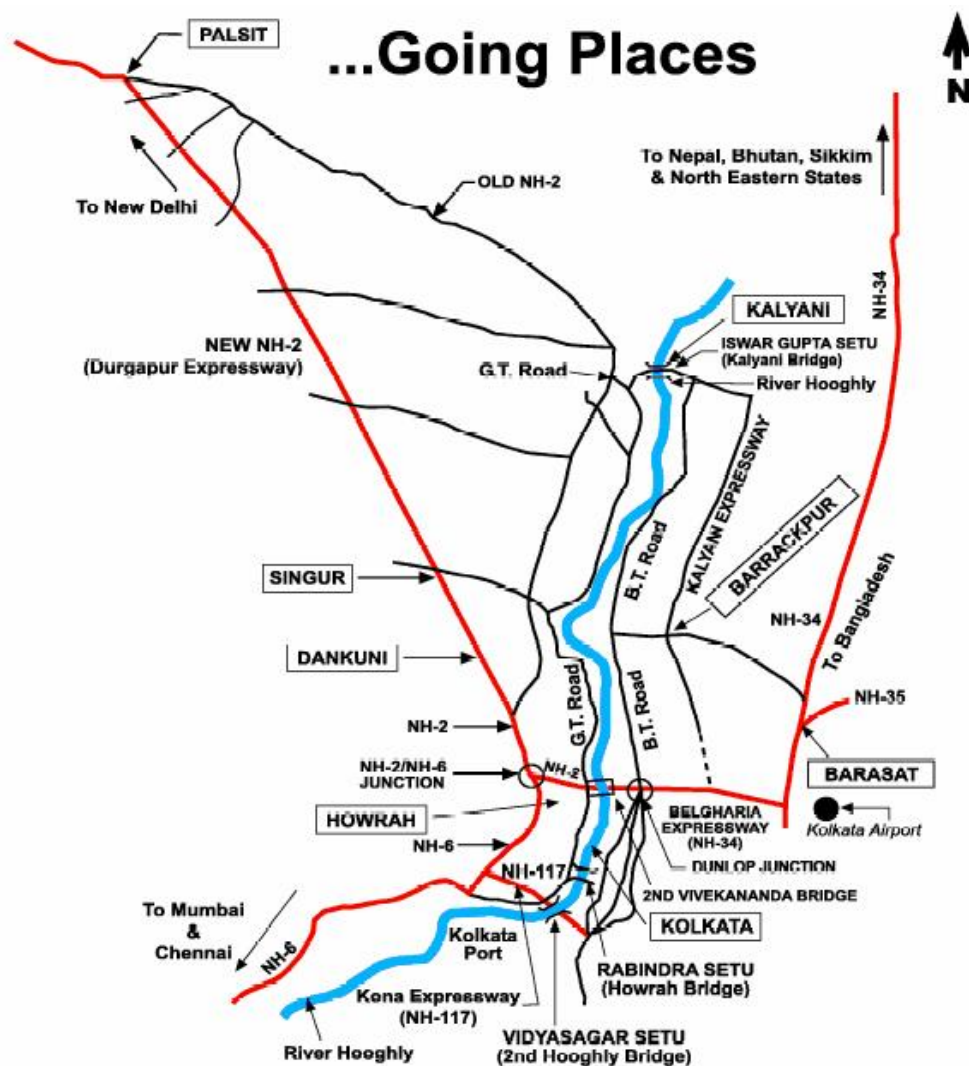


Figure 6.15: Location of the bridge project in the broader planning framework

Source: Imageshack<sup>41</sup>

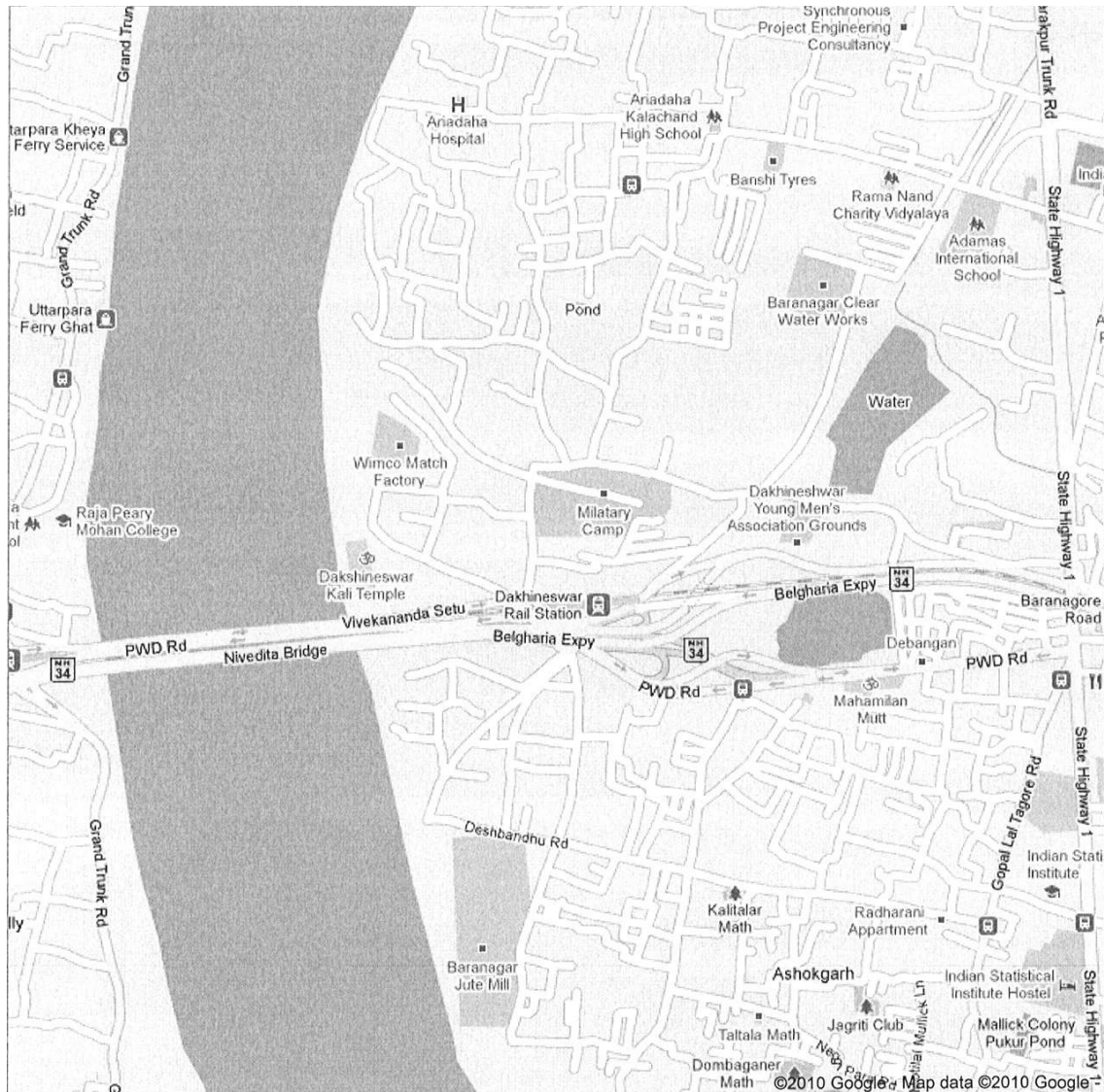


Figure 6.16: Other Public Works Department roads and expressways forming the whole network

Source: Google Maps<sup>42</sup>

## 6.11 Summary

This chapter presented an overview of national development plans in India to demonstrate how national highway development fits into the broad planning framework, and especially how the use of the PPP model has been adopted and prioritised in national development plans. In the course of the analysis, Chapter 7 in particular will discuss how

<sup>41</sup> <http://img66.imageshack.us/i/seconvivekmapdm7.jpg/> accessed 1 April 2013

<sup>42</sup> [https://maps.google.co.in/maps?oe=utf-8&rls=org.mozilla:en-US:official&client=firefox-a&channel=np&gfe\\_rd=cr&q=second+vivekananda+bridge&um=1&ie=UTF-8&sa=X&ei=4SzGU-7JENOeugSK84DwAw&ved=0CAkQAUoAg](https://maps.google.co.in/maps?oe=utf-8&rls=org.mozilla:en-US:official&client=firefox-a&channel=np&gfe_rd=cr&q=second+vivekananda+bridge&um=1&ie=UTF-8&sa=X&ei=4SzGU-7JENOeugSK84DwAw&ved=0CAkQAUoAg) accessed 16 July 2014.

such prioritisation of highway development undermines the wider population's demand for access to public information and restricts the scope of public scrutiny over decisions that are already settled within a national development plan. This chapter has also presented brief descriptions of the three projects to be investigated. Thus, the intention is that those chapters should be read within the context of highway development in India while, furthermore, each project should also be viewed within its particular context. The following chapter aims to analyse the issues of transparency during policy adoption and partnership formation in PPP.



## **Section IV: Data Analysis**

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**[Chapters 7, 8 & 9]**

## **Chapter 7. Transparency in Phase I: Project Decision, PPP Adoption, Selection of Form of PPP and Partnership Formation**

### **7.1 Introduction**

This chapter investigates transparency in Phase I: project decision, PPP adoption, selection of form of PPP and partnership formation. I argue that transparency must be operationalised in this phase in order to ensure public interests are protected within the decision-making in these four sub-phases. The chapter uses the following theoretical framework to explore the mechanism of transparency, its stated and bigger purposes, and barriers to it. Evidence from three cases is discussed collectively.

Q1. What are the mechanisms to operationalise transparency (using the following matrix on criteria of transparency)?

	Are there clear rationales (showing public interests are protected in the decision)?	Are those rationales documented?	Are those documents easily accessible by public?
Project decision			
PPP adoption			
Selection of form of PPP			
Partnership formation			

#### **How are the stated purposes of transparency met?**

- Is public-sector accountability about project decision, PPP adoption, and form of PPP selection met?
- Can the mechanism of transparency combat corruption, especially during partnership formation?

#### **How are the bigger purposes of transparency met?**

- Is public scrutiny of decisions allowed?
- Is the instrumental role of transparency served?

#### **What are the barriers to transparency?**

## **7.2 Project decision, PPP adoption, Selection of form of PPP, and Partnership formation**

This chapter draws empirical evidence collectively from three cases to investigate transparency in Phase I, using the criteria mentioned above and the framework. As discussed in Chapter 4, there is a strong rationale for protecting public interests within the decision-making in each sub-phase of project development. In the sub-phase of project decision, it must be ideally ensured that the ‘with or without project’ decision has been taken while keeping the public interest in view. For the sub-phase of adopting PPP and the selection of the form of PPP, it must be ideally ensured that the PPP model is adopted instead of the traditional model as it offers better value for money (VFM), and that the form is the most suitable for the particular infrastructure sector and context. However, existing studies show that VFM may not be the sole criterion for PPP adoption; moreover, a VFM methodology may not be used at all in the case of developing nations (Leigland and Shugard, 2006). In summary, to operationalise transparency in the adoption of PPP, a clear valid rationale must be disclosed to the public on decision-making. The rationale must ensure that public interests are upheld in the decision. Regarding the partnership formation phase, it must be ensured that partners are selected based on their efficiencies and by the pre-declared selection criterion, and not for any personal gain. Hence, the wider population would consider decisions to be made in a transparent way if there is a clear rationale for the decisions made, keeping public interest in view, if they are documented, and if those documents are accessible by public for public scrutiny. I also discuss whether the stated and bigger purposes of transparency were met, and what the barriers are, should those purposes not have been met.

This chapter primarily uses document analysis for data collection on the mechanism of transparency. Such data is triangulated by semi-structured interviews, or at times, field notes, if required for clarification of document analysis, until and unless data collection was restricted due to a hostile environment during fieldwork, as discussed in Chapter 6. The main constraint of data collection in this phase was the restricted access to financial information about the project decision, PPP adoption and concessionaire selection, and loss of documents on the regional development plan. As highways are capital-intensive projects, and at this stage the decisions on project identification and PPP adoption are solely made on economic rationales, lack of access to data affects the richness of analysis to a great extent. From the researcher’s side, it was also difficult to pursue the

core project actors to give access to such information considering the regional context, especially in the case of Jharkhand. Had the cases not been located in a region such as Jharkhand where the perception of corruption is high, it is anticipated that it could have been much easier to obtain access to information, which was crucial to the decision-making in this phase.

The three projects considered under this study are unique in nature. The first project, the Hazaribagh–Ranchi Expressway widening project, was identified for development under Phase III of the National Highway Development Program (NHDP) and was delivered through the most structured (updated) planning framework. Ranchi Ring Road, a state highway project, was categorised as a part of the regional development plan to mainly contribute towards development of that region. Finally, the Second Vivekananda Bridge was classified under the prestigious Golden Quadrilateral (GQ) project, which is Phase I of the NHDP. This particular project was identified to improve port connectivity. It was one of the first projects to use the PPP model in India, and hence was a single-bidder project.

### **7.3 Project decision**

#### **7.3.1 Mechanism**

As discussed in Chapter 4, project decision is the first sub-phase of Phase I (as defined for the purpose of this study). For national highway projects, higher central government authorities, such as the Planning Commission and the National Highways Authority of India (NHAI) are the decision-makers; whereas for state highway projects, that role falls to the state government Urban Planning Department (UPD) and Road Construction Department (RCD). Following the representation of transparency, as discussed in Chapter 4, the relevant public-sector department must have a clear rationale for making their decisions and must proactively disseminate information about the project decision in a public forum on their websites. As is evident from the two national highway projects, a clear rationale was published by the public-sector authorities concerned in the form of policy documents on their websites and other documents accessible by the public. In addition, a feasibility report showing analyses on ‘with or without project’ for the Second Vivekananda Bridge was accessed during fieldwork from the relevant project development authorities.



However, the mechanism of transparency was different in the case of the state highway project, especially for this sub-phase. There was no proper documentation on the project decision available in the public forum. While being interviewed, public-sector actors mentioned its evolution from the regional development plan (the Greater Ranchi Development Plan). However, the information was not proactively disseminated; in addition, these actors were unable to produce any document to support their statement. Whereas this study does not doubt the validity of the data based on this lack of documentation, as verbal confirmations came from authoritative positions, the inaccessibility of documents definitely raises questions about meeting transparency criteria. Moreover, it is worth mentioning here that, following the representation of transparency in Chapter 4, proactive dissemination of information only through websites still indicates restricted transparency. This is because the information is not disseminated in a 'technology-neutral' way, as only 12.6% of the Indian population has access to the internet.<sup>43</sup> The following is a discussion of each case's mechanism of transparency during the project decision sub-phase.

#### **7.3.1.1 Hazaribagh–Ranchi Expressway widening project**

The Hazaribagh–Ranchi Expressway widening project was identified under NHDP Phase III. The Planning Commission of India, the highest level of planning authority in the country, formulated the guidelines for project selection under this programme. These guidelines are proactively published online in the form of a policy document at the official website of the NHAI.<sup>44</sup> This particular project was identified under NHDP Phase III. The Planning Commission intended to upgrade existing two-way national highways connecting state capitals through the PPP model, as such highways facilitate frictionless movement of goods and people to contribute towards the economic development of the nation. As the existing Hazaribagh–Ranchi Expressway met the criteria of this phase, which are: a) it is an existing national highway; b) the existing highway is two-lane; c) it has high traffic density; and d) it connects the state capital (Govt of India, Ministry of Shipping, Road Transport and Highways, 2007), it was selected to be developed through NHDP Phase III. Hence, in this case, the evidence shows that the project decision was made based on the criteria outlined in the policy

<sup>43</sup> [https://www.google.co.in/search?q=internet+access+india+&ie=utf-8&oe=utf-8&rls=org.mozilla:en-US:official&client=firefox-a&source=hp&channel=np&gws\\_rd=cr&ei=SNM3Uu6mKYYW\\_rgfmxoHADQ#channel=np&q=internet+user+in+india&rls=org.mozilla:en-US%3Aofficial](https://www.google.co.in/search?q=internet+access+india+&ie=utf-8&oe=utf-8&rls=org.mozilla:en-US:official&client=firefox-a&source=hp&channel=np&gws_rd=cr&ei=SNM3Uu6mKYYW_rgfmxoHADQ#channel=np&q=internet+user+in+india&rls=org.mozilla:en-US%3Aofficial) accessed 1 June 2013

<sup>44</sup> <http://www.nhai.org/> accessed 1 June 2013

document, which is accessible by the wider population. As there is a clear rationale for this decision (securing public interests), the rationale is documented, and the document is easily accessible by the general population, the decision is considered to be transparent in the first place; the mechanism of transparency is considered to be in place, and also conforms to the policymakers' criteria of transparency.<sup>45</sup>

The next decision-making step in the sub-phase is that of project identification, where the project is identified to be delivered for the public benefit. Most rationally, a cost-benefit analysis should be carried out on the basis of 'with or without project' (Flyvbjerg, 2007); however, it has been proved that such an analysis may not be the basis of the decision-making, as such analysis can potentially be politically manipulated (Flyvbjerg *et al.*, 2003). As the analysis of policy documents show, in the Indian context, the project decision must be made either based on an economic rationale (and hence, on the 'value for money' criterion) or on a welfare basis. In this particular case, a project-specific cost-benefit analysis was carried out using a rubber-stamp procedure. Such analysis is part of the Detail Project Report preparation process. Following this analysis, the decision was made in favour of the project at a cost of Rs. 625 crore [USD 100 million]. This figure was also confirmed by a report published by the PPP and Infrastructure Division of the Planning Commission (2013).<sup>46</sup> However, as determined from follow-up interviews, the actual project decision was not based on such analysis (Interview 01, August 2010, Jharkhand, India). The decision had already been made as a political one by the highest planning authority long before even running the cost-benefit analysis, and the project was already identified under NHDP Phase III (Detail Project Report, Hazaribagh–Ranchi Expressway Limited), conforming to the analysis made by prior studies.

In addition to the NHAI policy document, there are project-level documents such as the Detail Project Report (DPR). In practice, such documents are prepared during the post-project identification stage. As already mentioned, the DPR is prepared in parallel to and as a part of the cost-benefit analysis in this case. In this case, the document emphasises the need for particular projects; however, the actual rationale behind identifying the project is situated in the policy document, and not in the project-related

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<sup>45</sup> [http://pppue.undp.2margraf.com/en/08\\_2.htm](http://pppue.undp.2margraf.com/en/08_2.htm) accessed 1 June 2013

<sup>46</sup> [http://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCkQFjAA&url=http%3A%2F%2Finfrastructure.gov.in%2Fpdf%2FDraft\\_Compndium\\_of\\_PPP\\_Projects\\_in\\_infrastructure.pdf&ei=2Wk4UuHRBsSIrOfI84CYBg&usg=AFQjCNHrRZLQnICyt7wCYA9PbCyFSHm5Lw&bvm=bv.52164340,d.bmk](http://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCkQFjAA&url=http%3A%2F%2Finfrastructure.gov.in%2Fpdf%2FDraft_Compndium_of_PPP_Projects_in_infrastructure.pdf&ei=2Wk4UuHRBsSIrOfI84CYBg&usg=AFQjCNHrRZLQnICyt7wCYA9PbCyFSHm5Lw&bvm=bv.52164340,d.bmk) accessed 15 July 2013

document. In the case of the Hazaribagh–Ranchi Expressway widening project, the DPR gives the purpose of the project as the connection of a backward region to the mainstream economy. The report acknowledges that this highway project is not commercially important, but is required on the grounds of improving the region; therefore, the rationale for project identification is not based on a cost-benefit analysis but on welfare. Hence, there are clear indications about rationales behind particular project decisions, which are available in the project documents. However, whereas the policy document is accessible online, the DPR is only accessible in hard copy at the public-sector project office by the general public. I was able to access the report at the private-sector concessionaires' office, as I had obtained written permission from the NHAI head office and the relevant public-sector project director (the letters are included in Appendix H). As mentioned in Chapter 5, a separate Right to Information (RTI) request was registered requesting these documents at a later date to check the general population's 'ease of accessibility'. The requests are still pending. Conforming to the literature, responses to RTI requests are time-consuming and the delay in processing RTI requests can be considered as a barrier to transparency (Roberts, 2000).

#### **7.3.1.2 Ranchi Ring Road**

As understood from key informants, Ranchi Ring Road was identified as an integral part of Greater Ranchi as proposed by Greater Ranchi Development Authority (Interview 09, September 2010, Jharkhand, India). As will be discussed shortly, this data came from an interview and it was not possible to access any documents about it. Since Jharkhand became an independent state in 2000, and Ranchi was declared to be its capital, the government of Jharkhand, and the Greater Ranchi Development Authority, in particular, proposed this ring road for two purposes: firstly, to alleviate congestion in the city of Ranchi, in order to promote its economic growth; and secondly, to manage its urban sprawl (Interview 11, August 2011, Jharkhand, India). As one of the key informants from the public sector says:

Ranchi Ring Road was planned to bypass the regional traffic. Due to the formation of a new state capital and increasing car ownership, Ranchi has become much congested. The regional traffic was also suffering due to intra-city traffic chaos. If commercial trucks are going to Jamshedpur from Gumla, they have to be stuck in the road traffic of Ranchi. Now, after the ring road is made, they can easily move. We are also trying to make less number of intersections and conflict areas. Also, in the intra-city traffic there are one ways during peak hour. With the ring road,

regional traffic will not have to face that. NH-23, 33 and 75 are passing through Ranchi. This ring road is a bypass for all these highways. We used to have traffic congestion from 9am-9pm. Now this congestion will be over. There are too many vehicles like luggage, cargo, standard, who would not have to be stuck. Since we are getting rid of congestion, vehicle movement will be faster, we can travel in less time, and it will contribute towards economic development ...

(Interviews 09 and 10, September 2010, Jharkhand, India)

This road alignment was proposed in accordance with the physical plan for Greater Ranchi. As mentioned by officials from the Greater Ranchi Development Authority, the existing alignment of the road was that specified in the original plan. However, with several changes in government, there have been many versions of the plan itself, keeping the alignment of the proposed Ranchi Ring Road intact. In order to triangulate the data, efforts were made to verify such statements directly from official documents on the Greater Ranchi Plan. However, it was not possible to access any relevant documents to support these statements, due to lack of documentation, except for the DPR for the Ranchi Ring Road project (Detail Project Report, Ranchi Ring Road, prepared by MSV International Inc.). I visited the office of the Greater Ranchi Development Authority; they mentioned that they were in the process of developing the plan and did not have access to any old documents. On the basis of the matrix in the first section of this chapter, there was a clear rationale for decision-making. However, this rationale is not well documented, therefore making it impossible for the wider population to access any such document. Hence, the criteria for transparency are not completely met here. Even the validity of the rationale can be challenged. The absence of any document in the public forum on the rationale of the project decision is considered to demonstrate restricted transparency. Moreover, as this project was a regional one, there was no information available on the website; therefore, it was not possible for the researcher to discover any details of the project without physically visiting the field. The only online source of information for this project was media reports. This also raises questions about the transparency of the project development process and project decision. However, project-specific information was much more accessible than for national highway projects, through being physically present at the location, as the actors were very cooperative and more directly answerable and accountable for their actions. Here, a distinction can be drawn with decision-making in national highway projects. It can be argued that as national highways serve national purposes, which may conflict with regional purposes, decision-making actors for

national highway projects are more distant from people in the regions, questioning how regional interests are served by their project. In contrast, as state highways directly serve regional purposes, actors in decision-making positions for state highways do not need to distance themselves from the people. However, evidence to support the argument for Ranchi Ring Road in the form of documentation was missing. Regional actors' sense of accountability was also reflected during interaction with the affected communities near to Ranchi Ring Road. Data in relation to the affected communities is discussed in Chapter 8, where transparency of the land development phase is discussed. This fact potentially contributes to the understanding of measuring 'transparency' as 'disclosure of information', and mainly its link with 'maintaining public-sector accountability'.

### **7.3.1.3 Project identification under JARDCL**

The whole Ranchi Ring Road was divided into six segments. Three of those segments were allotted to Jharkhand Accelerated Road Development Construction Limited (JARDCL) for development. For the purpose of this particular research, this subsection investigates transparency of that section identified for development by JARDCL. Since this region is rich in minerals and forestry, there are three national highways passing through this region. As shown in Figure 7.1, the whole road alignment is divided into six segments at intersections with national highways. Three modes of delivery have been adopted for the whole project: state government RCD, NHAI-PPP,<sup>47</sup> and JARDCL-PPP.<sup>48</sup> For the purposes of this study, only the third mode is discussed.

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<sup>47</sup> National Highway Authority of India: Public Private Partnership

<sup>48</sup> Jharkhand Accelerated Road Development Construction Ltd: Public Private Partnership

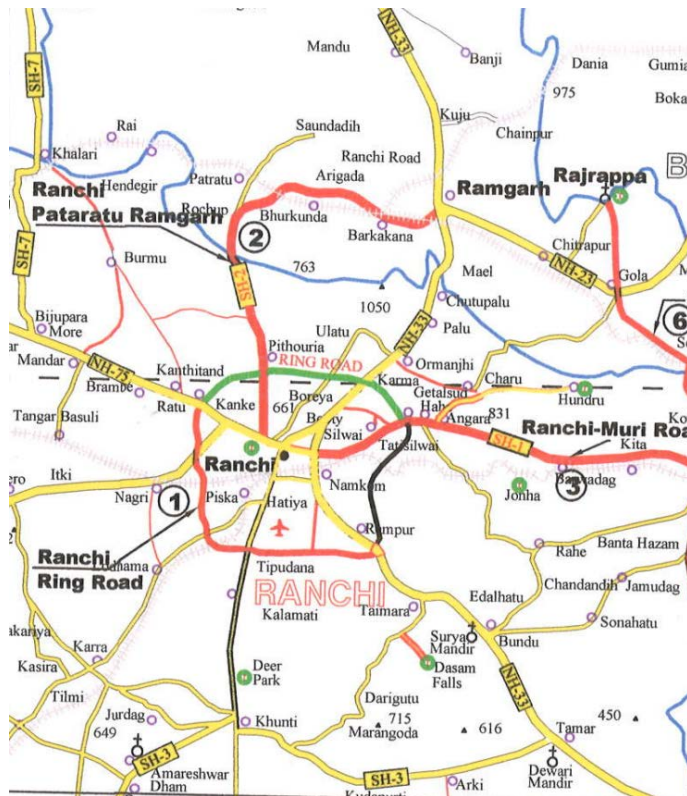


Figure 7.1: Location of Ranchi Ring Road in the Jharkhand region

Source: Document 13: IL&FS, August 2010, Ranchi, India

The overall project was divided into three segments and allotted to these three modes of delivery through a negotiation process between potential actors (Interview 09, September 2010, Jharkhand, India; Interview 11, August 2011, Jharkhand, India). As the conversation unfolded, it was evident that the negotiation process was highly influenced by the power relations amongst national and regional actors. In this case, NHAI exercised their authoritative power. As this region is underdeveloped but rich in resources, so making a considerable contribution to the national economy, there was an opportunity for the state government to be persuasive to the central government with regard to funding (Interviews 09 and 10, September 2010, Jharkhand, India). Through the negotiation process between the central and state governments, only a stretch bypassing two national highways without entering the centre of Ranchi (shown in black in Figure 7.1), was taken forward by the NHAI to be developed through PPP:

... Govt of Jharkhand had a budget of Rs. 120 crores only. Hence, it was obvious that government cannot do the project on its own. Govt of Jharkhand tried to convince the central government that these are bypassing National Highways and hence NHAI can pick up these projects. Somehow it didn't materialize. Later on NHAI mentioned that even if they pick up the project, they would develop only a segment of

this. Hence, it won't be a ring road. Since this ring road will contribute towards development of Ranchi, the capital of Jharkhand, it is the responsibility of state government. Hence, this project was divided in three segments and three different models were chosen for development. There is no connection between them. We still plan to have greater Ranchi surrounding section VII ...

(Interview 11, August 2011, Jharkhand, India)

At this stage, as the overall phase of project identification, PPP adoption, and selection of the form of PPP was carried out through a negotiation process, there is a lack of documentation available to the public showing a clear rationale for making such decisions. For the purposes of this study, data could be collected through semi-structured interviews only. Hence, it was not possible to triangulate data from other sources as the decisions had already been taken and there was no documentation. It must be mentioned that the interviewees described the negotiation process in the form of a narrative, still reiterating how regional actors could have been more persuasive in convincing the NHAI decision-makers to take up responsibility for longer stretches of road to be delivered by NHAI. In summary, statements made by core actors were the only source of information to understand how the project was identified for development. This lack of documentation is identified as a barrier to transparency in the case of regional government, following the criteria set by the proposed framework. Following Florini (2007), as there was no proactive 'disclosure of information about [the] public sector's way of working', the mechanism of transparency is considered not to be in place.

Overall, as the evidence above shows, project identification and PPP adoption (in terms of who takes up the responsibility to construct the project) is a complex process. Conforming to Flyvbjerg et al. (2003), besides 'with or without project' and 'value for money' analysis, decisions are also highly political and power-influenced. However, in line with what is described in the literature, this is a usual decision-making process in the Indian context, especially in an underdeveloped region like Jharkhand, where resources are limited but there is an immediate need for development. Hence, even though this does not conform to international development agencies' best practice on transparency, it is first of all important to raise the question whether such practices are doing good to the region. In this case, this region would not have experienced development if decisions had been made based solely on strict guidelines. This discussion is revisited under the section on barriers to transparency.

### 7.3.1.4 Second Vivekananda Bridge

The Second Vivekananda Bridge is a part of the prestigious Golden Quadrilateral (GQ) highway project under NHDP Phase I. This project was identified in the National Development Plan to improve port connectivity. The development of this project was adopted to upgrade existing infrastructure, through completing the missing link of the GQ highway project. As mentioned in NHDP Phase I:

The NHDP envisages four-laning/six-laning of the existing two lanes and its implementation has been entrusted to the National Highways Authority of India (NHAI). The NHDP would involve an investment of Rs.54,000 crore [USD 8.64 billion] and the Government has made arrangements to ensure availability of funds through cess on petrol and diesel, multilateral funding, normal budgetary allocations and market borrowing. In addition, the NHAI will also take up four-laning of about 1,000 km [621 miles], which includes port connectivity of 400 km [249 miles] and other projects of 600 km [373 miles] at a cost of about Rs. 4,000 crore [USD 640 million].

(Planning Commission, Govt. of India, 2002: 949)<sup>49</sup>

This quote is from an online policy document from the tenth Five Year Plan, available on the Planning Commission of India website. It shows that at the project identification level, transparency is represented as the ‘disclosure of information’ on the decision-making concerning a particular project. The Second Vivekananda Bridge project was also identified under NHDP Phase I, as the Hazaribagh–Ranchi Expressway widening project was identified under NHDP Phase III. Although the ‘with or without project’ analysis for this specific project has not yet been carried out, the project was identified for development on the grounds of a clear rationale. The public’s easy access to the online policy document on project identification, clearly outlining the rationale for taking decision in favour of carrying out this project, is considered to be the mechanism of transparency in place. Moreover, the importance of undertaking this project was decided politically and is economically justified (on the grounds of national economic development) at this stage of project identification by the highest planning authority. In the next stage, the DPR gives details of the project to determine costs. The DPR could be accessed in hard copy at the private-sector concessionaire’s office. Hence, the combination of the policy document and the project-specific DPR can be considered the mechanism to operationalise transparency.

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<sup>49</sup> [http://planningcommission.nic.in/plans/planrel/fiveyr/10th/volume2/10th\\_vol2.pdf](http://planningcommission.nic.in/plans/planrel/fiveyr/10th/volume2/10th_vol2.pdf) accessed 1 June 2013



### 7.3.1.5 Cost-benefit analysis and optimism bias

Although cost-benefit analyses are infamously known for overestimating benefits and underestimating costs, it is still a tradition to run a ‘with or without project’ analysis for the project decision. Project promoters’ optimism bias in traditional model is widely discussed in the literature (Flyvbjerg *et al.*, 2003). The particular case of the Second Vivekananda Bridge provides some interesting data in favour of ‘optimism bias’ even in PPPs, and elaborates on how the nature of analysis differs depending on the position of the analyser. Decision-makers are even proved to have such bias in PPP adoption decisions, by unrealistically passing on all the risks on to the potential private-sector actors (Burger and Hawkesworth, 2011). Data from the Second Vivekananda Bridge confirms that simply shifting the construction risk to the private sector by adopting PPP and using an innovative framework of accountability is not the solution. In practice, the public-sector partner hires consultants to prepare a DPR and preliminary cost-benefit analysis during project identification. Key informants from this particular case indicate that risk is perceived differently by external consultants and public-sector actors while running the analysis in comparison to that run by private-sector investors whose money is at stake in the project (Interview 12, September 2010, Kolkata, India).

While ‘optimism bias’ in the traditional model is mainly about underestimating cost and overestimating benefit to take a positive decision about the project, ‘perception of risk’ concerns the private sector’s willingness to bear a certain amount of cost overrun, which is to some extent uncertain. As the interviewee mentions, the analysts’ perception of risk in a project is higher if they have to make the investment themselves.

It is important to understand the difference of this ‘perception of risk’ from mere ‘optimism bias’ as a PPP model is designed in a way that part of the ‘risk capital’ has to be mobilised by the private-sector partner to deliver the project. Referring back to the evolution of the PPP model over the traditional model, traditional models were known for cost overruns resulting from uncertainty and risk; such cost overruns were being paid for by public money. In order to secure public interests and not pay cost overruns from public money, the PPP model was theoretically designed to pass on this uncertain but inevitable cost overrun to the private-sector partners in the form of risk capital. As this opened up the infrastructure sector to the private-sector actors as a business opportunity, they were willing to accept the risk and bear the risk capital in the case of cost overrun. Since it is a ‘risk’ and not tangible at the preliminary stage of project

design and development, the private sector's perception of risk is important, as it decides the project cost for them. Without the private sector's acceptance of bearing the risk capital, no PPP will be formed at all. This is also different from unrealistically passing on the risk to actors who are not able to manage it and would consequently end up deriving a higher project cost, as described above by Burger and Hawkesworth (2011). Such a difference in 'perception of risk' reflects a more accountable decision-making process by the private-sector actors, as expected under the PPP model. For instance, in the case of PPP projects, since the construction risk lies with the private-sector partners, they bear the additional investment in the case of cost overruns. As the ex-secretary of the West Bengal RCD and the current CEO of Second Vivekananda Bridge Tollway Company explains:

... as we have seen, bidders still get the cost wrong by 50%. For example, if the government evaluates a project cost as Rs. 1000 crores [USD 160 million], it will be actually Rs. 1500 crores [USD 240 million]. The average variation in project cost is 1.3–1.5 times. Hence, there is an ongoing debate in the field on why the cost of funding would vary in two cases where highway consultants work as advisers in both the cases? It looks like the perception of vendor is different in those cases from the theoretical point of view.

We have seen that a project consultant and a builder evaluate the same projects in two ways. Generally the builders' value is always 25–30% more than consultants. It might be because of the risk for project consultant is less; they don't have to pay anything. But it is a matter of life or death for builders.

(Interview 12, September 2010, Kolkata, India)

This quotation also reflects why PPP models must deliver more accountable projects than the traditional model. Although there was no evidence on methods like reference class forecasting (Flyvbjerg *et al.*, 2003) to get more realistic results in the case of the Second Vivekananda Bridge, the interviewee mentioned that such methods are in use nowadays to obtain more accurate results. The data mentioned above was mainly collected from semi-structured interviews with core actors who have abundant hands-on experience in PPP projects. Although it was not possible to access such reports to verify the comments, the key informant was a senior officer with experience in both the public and private sectors, one of the active members who have seen the birth and evolution of the PPP model in India, and he was interviewed based on project-specific real data. This influence of actors' risk perception within a project depending on their position is confirmed by Akintoye *et al.* (1998), Li *et al.* (2004) and Bing *et al.* (2005) in the UK context. However, they claimed that the perception of risk varies according to one's

experience and role in a project. The case of the Second Vivekananda Bridge shows that it varies depending on one's stake in the project.

### ***7.3.2 Stated purpose of transparency***

As discussed in Chapter 4, the stated purpose of transparency in the project decision sub-phase is public-sector accountability. In PPPs, citizens and voters are considered stakeholders of the project, following the UNDP guidelines. As evident from the above discussion of the three cases, public-sector accountability is met in the cases of the Hazaribagh–Ranchi Expressway widening project and the Second Vivekananda Bridge by disclosing the clear rationale for the project decisions through policy documents, and proactively publishing the documents on the official websites of the relevant public-sector authorities. However, this study raises questions about transparency, as documents are accessible only through the web and are therefore not disclosed in a 'technology-neutral way' as prescribed by policymakers. In the case of Ranchi Ring Road, there is a clear rationale for decisions; however, as the data is collected from interviews and documentation is lacking, theoretically this raises questions about the mechanism of transparency itself, and hence, about public-sector accountability. However, as discussed previously, public-sector actors are more easily accessible, answerable and accountable for their decisions to the population in the case of state highways in comparison to national highways.

### ***7.3.3 Bigger purpose of transparency***

Following Sen's (1999) capability approach, the bigger purpose of transparency in this case is the public scrutiny of public-sector decisions. As evident from the Hazaribagh–Ranchi Expressway and Second Vivekananda Bridge cases, although the mechanism of transparency is in place by disclosing information about the public sector's way of working, the process of disclosure is one-way, and it provides very little room for direct public scrutiny of the decisions, except by the indirect method of voting.

In the case of Ranchi Ring Road, although the proper mechanism of transparency is not in place, regional actors are more easily accessible and accountable for their decisions. However, in terms of the purpose of transparency, this raises questions about their accountability towards the wider population, as information about how decisions are made internally is not fully disclosed to them. As described in Chapter 3, Sen (2009)

would argue that such a decision on public infrastructure is not arrived at by public discussion through public scrutiny of values and priorities, which is an essential component of deliberative democracy. Hence, transparency fails to play an instrumental role here.

#### **7.3.4 *Barriers to transparency***

In the cases of the Hazaribagh–Ranchi Expressway widening project and the Second Vivekananda Bridge, the strong authoritative power of NHAI is considered the barrier to meeting the bigger purpose of transparency. As discussed in Chapter 6, NHAI has been endowed with the highest authoritative power at central government level to encourage the process of highway development in India on the grounds of advancing economic development. Primarily, the absence of any window for the wider population to facilitate an interactive discussion (except for the indirect one of voting) to directly influence project decisions is considered a barrier to transparency.

In the case of Ranchi Ring Road, the changes in government (therefore, political transition) and the lack of documentation on the changing plan were identified as barriers to transparency in terms of disclosing information on the rationale for the project decision. In this case, key informants' statements on project identification demonstrates that the power distribution amongst actors influences their conflicting interests on resource allocation (Interview 09, September 2010, Jharkhand, India). For instance, in the case of Ranchi Ring Road, NHAI was cautious to develop only a particular stretch of the road that serves the national purpose, as funding from NHAI would come from the central government. On the other hand, in spite of being an underdeveloped region and in need of more central support, the regional government had to fund the balance of the ring road, as this was developed for regional development. However, information on that negotiation process was not available in the public forum, and data on it was collected only through interviews. Hence, the unequal power distribution played a significant role in such decision-making.

### **7.4 PPP adoption and Selection of form of PPP**

#### **7.4.1 *Mechanism***

As discussed in Chapter 3, the mechanism of transparency for PPP adoption is to disclose information on the rationale behind adopting the PPP model over the traditional

model and the selection of the form of PPP, the documentation of this and the accessibility of such documents by the wider population. The central question of the literature on PPP is based around whether PPPs are better value for money than the traditional model, as initially this was the sole reason for adopting PPP as opposed to the traditional model (Siemiatycki and Farooqi, 2012). However, it is also evident from the literature that PPPs were adopted as the public sector had a scarcity of resources to deliver public infrastructure, both in Europe and in developing nations (Linder, 1999). As the evidence shows, the decision concerning the adoption of PPP is mainly taken due to the public sector's financial resource crunch, and market forces and contextual factors effectively choose the forms of PPP. The following are some pieces of evidence from the three cases.

#### **7.4.1.1 Hazaribagh–Ranchi Expressway widening project**

In the case of the Hazaribagh–Ranchi Expressway widening project, the PPP model was adopted as an infrastructure-delivery tool instead of the traditional model, influenced by the policy decision made for NHDP Phase III. This decision was taken by the Ministry of Road Transport and Highways (MoRTH), the highest road planning authority in India. A report published by MoRTH says:

Under this, Government has approved up-gradation of 12,109 km [7,524 miles] of existing National Highways to two lanes with paved shoulders/ four/six lane having high traffic density, connecting important tourist locations, economically important areas, state capitals etc on build, operate and transfer (BOT) basis with a maximum viability gap funding of 40%. The estimated cost for development of these stretches is Rs. 80,626 crore [USD 12.9 billion]. 17.13% of length awarded, out of which 3.39% length completed. NHDP-III is scheduled for completion by Dec. 2013.

(Ministry of Road Transport and Highways (MoRTH), online)<sup>50</sup>

The Planning Commission decided to use PPP models to deliver the NHDP Phase III project as the public sector did not have enough financial resources to do so, and it will be viable for private-sector investors to invest in highway upgrade projects under NHDP Phase III due to their nature. Since this extract is presented in a policy document, it is considered a mechanism to operationalise transparency by disclosing information on policy formulation to the wider population. The policy states that Phase III projects are designated to use the Build-Operate-Transfer (BOT) form of PPP model, within

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<sup>50</sup> <http://morth.nic.in/> accessed 1 June 2013

which the roles of private-sector actors are restricted to the building, operation and transfer of projects which have been initially planned (identified) and designed by the NHAI, as already described in Chapter 6. Here PPP is adopted instead of the traditional model due to the public sector's financial resource problems. The choice of BOT as the form of PPP is sector- and context-specific. As the rationale behind adopting PPP and the particular form of PPP is clearly stated in the policy document to be based on a political decision, the criterion for transparency is considered to be met here. This project was already politically prioritised in the national plan at the same time as a contraction in public-sector financial resources for the delivery of such projects (Planning Commission, Govt of India, 2002; Interview 08, September 2010, Jharkhand, India).

However, although the above extract shows BOT to be the designated model for NHDP Phase III, the actual model used for the project is BOT annuity rather than BOT toll. The final selection of the form of PPP was not only politically decided, but negotiated with the potential private-sector actors due to contextual factors. There was a series of events that eventually led the public-sector actors to adopt the annuity model rather than the toll model (Field note 03, August 2010, Jharkhand, India). Below is a discussion on how potential private-sector actors pursued the public sector to adopt the annuity instead of the toll model together with some evidence. This can be also connected to the discussion of the private sector's 'perception of risk' above, in relation to the Second Vivekananda Bridge, as private-sector investors had a higher perception of risk in this region. However, if the report mentioned above is considered to be the sole mechanism of transparency concerning the adoption of the form of PPP, then such transparency can be questioned, as it neither represents the true rationale for the adoption of the specific form of PPP, nor the form actually adopted, even if there is a clear logical rationale to adopt the PPP annuity model.

As there are a limited number of private-sector actors in the field, and such actors have profit-seeking motives to invest in projects (Linder, 1999), they tend to choose to invest in those regions where they would get a quicker, easier and better return on their investment. These are known as investment-conducive environments. As documents such as the concessionaire agreement show, regional or state governments play a significant role in delivering such environments (Document 06: NHAI, 2010, Kolkata, India). Due to the limited number of private-sector actors, there is competition between regional or state governments to attract them to form PPPs in their regions. Such

regional and state government actors are responsible for delivering an investment-conducive environment.

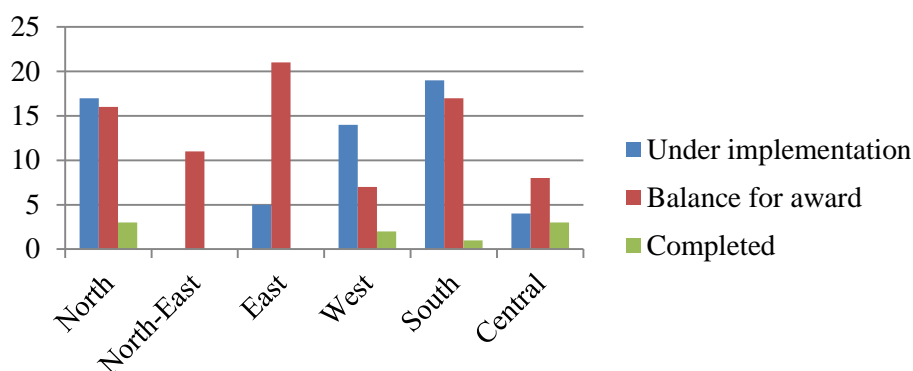


Figure 7.2: Status of projects delivered through PPP in different regions

Source: Author

Figure 7.2 shows the distribution of PPP projects in different regions in India. The y-axis shows the number of projects that have been, or are to be, delivered through PPP in Phase III of NHDP. As the figure shows, there are very few completed projects, with the highest number in the northern and central regions. The southern region has the greatest number of projects under implementation; however, the eastern region has the greatest number due for award. This indicates that the eastern region is lagging behind the other regions in terms of partnership formation. Key informants from potential private-sector actors also confirmed this during interview (Interview 12, September 2010, Kolkata, India). The Hazaribagh–Ranchi Expressway widening project is located in the eastern region. As mentioned by one of the key informants, this also influenced the selection of the form of the PPP model in this region (Interview 08, September 2010, Jharkhand, India; Accompanied site visit 01, August 2010, Ranchi, India). This, in turn, prompted the core public-sector actors to adopt those PPP models in which the private sector bears a reduced risk.

In this particular case, the project adopted the BOT toll model, as specified in the policy documentation for private-sector actors. However, in the case of the Hazaribagh–Ranchi Expressway, because this project is located in the eastern region and in the underdeveloped region of Jharkhand, it adopted the BOT annuity model rather than the toll model. As described in Chapter 2, in a BOT toll model, the demand risk lies with the private sector, whereas in the case of the annuity model, the private sector is assured of returns from the project as they receive a predetermined annuity during the

operational phase of the project from the public-sector partner. Reflecting upon the previous discussion on the private sector's perception of risk, private-sector actors had a higher perception of risk in this region, and hence, they did not bid for the toll model at all. Since the private-sector actors were not willing to bear the risk capital, no PPP could be formed using the toll model; instead, a BOT (annuity) PPP was formed. As per Auriol and Picard's (2009) theory, PPP models suffer from allocative efficiency due to private-sector actors' profit-oriented interest. Since the HREL widening project was serving a public welfare purpose, and as the annuity model allows increased state regulation, the model could also have been adopted on the ground of assuring allocative efficiency. However, evidence such as document analysis and interviews from the case show that the rationale behind adopting the annuity model was to delegate reduced risk to the private-sector actors, rather than to ensure increased state regulation and better allocative efficiency. However, it does not necessarily imply that this annuity payment is made with public money, and accordingly, this model has the potential to be taken off the public balance sheet in the same way as the toll model (Kalidindi, 2006). Thomas *et al.* (2003) also confirm that due to differences between risk distribution and risk management, such variations of models used are evident in India. The annuity payment is, in the first instance, covered by a user fee, which the public-sector partner collects from the road users. Only in cases where the project does not generate enough demand does the annuity get paid from the public purse. Based on these conditions, annuity models are more publicly accountable than toll models, following Florini (2007), who argues that information regarding how public money is being used belongs to the public.

There are two reasons for the private sector's higher perception of risk in the Hazaribagh–Ranchi Expressway widening project. Firstly, as described in the executive summary of the DPR, the project is not commercially viable in terms of generating revenue for private-sector investors. The project aims to connect socially backward regions to the mainstream of economy (Document 11: DPR, Hazaribagh–Ranchi Expressway, accessed in August 2010, Ranchi, India). Hence, one main reason why the private sector would not opt to bid for the toll model is that they are not assured of toll returns from the project. As noted in the executive summary of the project report:

Hazaribagh-Ranchi section of NH-33 is the primary and principal mode of transportation running across Jharkhand connecting most of the backward regions of the state and connecting Jharkhand with other states. The highway may not have a pedigreed history like the GT Road



(NH-2) or the commercial importance of other NH linking metro cities, but it certainly is in connection of being one of the busiest highways of eastern region in the coming years. The ever neglected and suppressed region of India, Jharkhand is no longer lagging behind but gaining stature at a considerable pace.

(Hazaribagh Ranchi Expressway Limited, 2010: 0–1)

Secondly, as mentioned by key informants and published through media reports, private-sector actors have a perception of higher investment risks in development projects in the region due to its socio-economic background and political status (Field note 03, August 2010, Jharkhand, India; Document 12: <http://www.ibnlive.in.com>, April 2012, Ranchi, India). Thus, the public sector had faced a considerable struggle to find partners for projects on a toll basis in this region; finally, they had to settle for an annuity model, which shifts the major risks, even in the operation stage, to the public-sector partner. This shows that in the case of infrastructure-PPPs, the selection of the specific form of PPP is not always predetermined and planned as stated in the policy documents. Rather, it is decided through negotiation over risk distribution amongst actors, and hence, is influenced by the distribution of power amongst actors (Chen and Hubbard, 2012). In this case, private-sector bidders have greater power due to the limited number of players in the field; hence, they have the upper hand in negotiating the terms and conditions of risk distribution. The selection and adoption of the PPP model in the real world therefore emerges through negotiation between actors with unequal powers. However, the mechanism of transparency is considered to be restricted as no public declaration is made explaining the conditions under which the decisions were made to select the final form of PPP.

#### **7.4.1.2 Ranchi Ring Road**

The overall Ranchi Ring Road project was divided into three sections. Various agencies negotiated to construct each of the sections through PPP models. This decision was solely based on the fact that there were not enough public funds available to support such a huge project (Interview 11, August 2011, Jharkhand, India). Hence, the PPP model was not chosen for the project on the basis that it was better value for money in comparison to the traditional mode of delivery, but based on the priority of the project and the lack of public funding to advance the economic development of the region. Hence, there was a clear rationale for adopting PPP for the stretch of Ranchi Ring Road concerned. However, this data was collected from interviews with core actors such as

the deputy secretary of the Jharkhand RCD, and there was no proper documentation of the rationale. This raises a question about the mechanism of transparency in this case. In terms of motivation to adopt PPP, as Linder (1999) would argue, since the project was already identified by the regional planning development authority, the partnership formed to deliver this project would be recognised as a problem conversion model. This is because the problem was already identified by public-sector actors and partnerships were formed to address those problems, due to the sharp contraction in public-sector financial resources. Besides financial resource scarcity, there are various rationales that led the state government to adopt PPP. These are discussed below. However, most of the information is collected from semi-structured interviews with core actors and field notes; there is a lack of documentation on the rationale of PPP adoption. Hence, the mechanism to operationalise transparency might be considered not to be in place, due to lack of documentation. As one of the key informants notes:

PPP is the only option Govt. of Jharkhand has got. They don't have the capacity to invest such huge amount in infrastructure. In case of PPP, they don't have to spend a penny for the maintenance of the road for the whole concession period. They will pay annuity but in instalments, and in 15 years. In addition, they will get a world-class facility back after the end of the concession period.

(Interview 08, September 2010, Jharkhand, India)

As observed by another key informant, the whole stretch of road will be built using the PPP model and will impose a user charge irrespective of the development authority, as the public sector is incapable of financing such projects.

The NH bypass is going to be a toll road. Also, GoJ [Govt of Jharkhand] alignment will be a toll road. Since these are fresh alignments, from the very beginning these will be introduced as toll roads so that users don't feel like that they were using this road free of cost before. Annuity model doesn't mean government cannot charge toll. Where the government will pay that annuity from? It's just that private sector is not collecting the toll themselves. Such road alignments are designed on the basis of alternative analysis, toll is charged taken from money saved.

(Interview 11, August 2011, Jharkhand, India)

In addition to this, the demand for 'world-class' infrastructure meant that the private sector was invited into road projects due to their efficiency and specialisation. These newly upgraded pieces of infrastructure demanded specialised construction skills, which had not previously been needed. Such infrastructure was claimed to be 'world-class' by the core developers of the project, from both the public and private sectors (Interview 7,

August 2010, Jharkhand, India; Interview 11, September 2011, Jharkhand, India). As the deputy secretary of the Road Construction Department (RCD), Government of Jharkhand mentions:

Past roads used to be a by-product of something else like industrial use, for employing labour. It used to be employment based and labour based. Things have changed recently. Roads work as administrative network; and also, economic development, as we say, roads that build nation. Now we demand for highly mechanized type of mobility, we do have modern cars and we need better road for them. It has to be compatible to the vehicle. Now it has become need to use good quality of road. Such road construction is cost intensive. However, we do have limited resources. We also need to look into social sectors. We need upfront investment, which cannot come from public. So, there are three reasons: upfront investment, technical expertise (no training in public sector, hands on experience, competition), and risk distribution. Now we are buying kms of maintained road. The focus is more on governance. Get good roads. Risk is with the person best suited to handle.

(Interview 11, August 2011, Jharkhand, India)

However, the PPP model has been adopted based on these rationales, instead of the traditional model, but there is no document available clearly indicating such rationales. This statement conforms to Rosendorff *et al.*'s (2011) theory on connecting democracy and transparency through efficiency. It clearly shows that PPPs are formed to deliver highways in order to assure efficient resource allocation to other sectors. Hence, in the case of Ranchi Ring Road, the mechanism of transparency is not in place where PPP adoption is concerned.

As the next step, this subsection first investigates the rationale behind the adoption of PPP to accelerate the road development in Jharkhand, which led to the formation of JARDCL. The first stage of partnership formation is the formation of a special purpose vehicle (SPV), known as JARDCL in this case. This is a joint-sector company formed between the state government RCD and a private-sector company, Infrastructure Leasing & Financial Services (IL&FS). From the name, it is evident that this SPV was formed to accelerate the road development in the state, as the state is underdeveloped and road construction is considered the first step towards development. This is a familiar model of partnership formation for state government departments seeking to advance the development process in India (3iNetwork, 2008). Figure 7.3 below graphically represents the institutionalisation process of such accelerated infrastructure development.

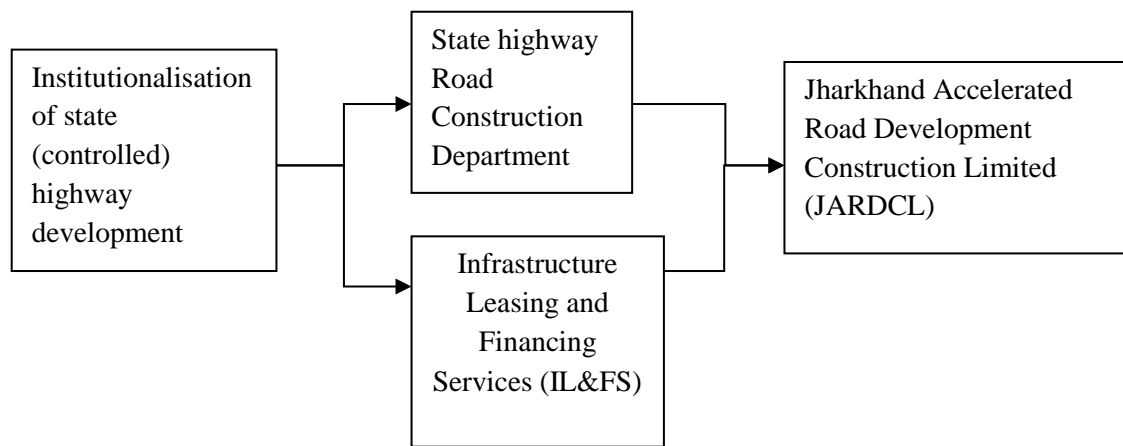


Figure 7.3: Formation of Jharkhand Accelerated Road Development Company Limited as a development-PPP

Source: Author

Following Weihe's (2006) classification and definition, the case of Ranchi Ring Road offers JARDCL as a unique example of a 'development-PPP' and delivers an investment-conducive environment for the next-level, project-specific PPP, Jharkhand Accelerated Road Project Limited (the infrastructure-PPP), for the smooth processing of the private sector's investment. By Weihe's (2008) definition:

... there has been a marked increase of partnership activities in the development area since 2002. The central focus in the development approach is achievement of development goals. Here PPPs are means to achieve such broad ends as to reduce poverty and social deprivation, reduce corruption and environmental improvement. Although they are typically not directly engaged in partnerships, key actors in development PPPs are national and international (non)-governmental aid organisations. Their role lies primarily in that of promoting and creating environments conducive to PPP in recipient countries.

(Weihe, 2008: 434)

On being asked about their way of working, a key informant from the private-sector side of JARDCL responded:

Whatever the situation is, we deal with this case by case. There is no problem in handling those problems. The only thing is if it has any financial implication. There is nothing, which cannot be solved .... The concessionaire company JARDCL, and the government are partner to it. And private sector is also partner. So, whatever the problem is, JARDCL should be able to handle it. The conditions in the contract have been designed keeping in mind the limitations in the government and the support the government can get from the concessionaire. And generally the conditions are okay ....

(Interview 08, September 2010, Jharkhand, India)

This quote clearly says that the role of this body is to assure the smooth operation of the infrastructure-PPP and to take action where the state government department acting alone would not have done so. At this stage, the private-sector actors are invited to form partnerships at this level and given authority over issues that otherwise remain only under public-sector authority. Hence, in this case, the purpose of inviting the private sector is to accelerate the development process through management reform. As Linder (1999) would argue:

... as a management reform, partnerships are promoted as an innovative tool that will change the way government functions, largely by tapping into the discipline of the market. To do this, managers of government programs must formally enlist the collaboration of profit seeking firms that (presumably) already enjoy the benefit of such disciplines.

(Linder, 1999: 42)

Following Linder (1999), JARDCL could be termed as PPP formation for management reform. In this case, as the key informant mentions, the partnership is formed between the Jharkhand RCD and the private-sector firm IL&FS, which is already in the road construction sector (Interview 08, September 2010, Jharkhand, India). As Linder (1999) also observes, here the relationship should be more one of mentoring, rather than a joint undertaking; government managers should ideally pick up the private sector's methods of working, rather than the other way around. This theory is again confirmed by the words of a core public-sector actor in an interview for this study:

In our case, JARDCL is a joint venture. Private party is also partner. We have made an arrangement. The concessionaire agreement says what the obligations are. Due to the close distance working way, government and private partner both have adopted others' working pattern. Although it's a joint venture, we do have shared responsibility. Certain jobs are split though mainly depending on the authority.

(Interview 11, August 2011, Jharkhand, India)

In this case, it must be mentioned that JARDCL again formed a project-specific partnership with IL&FS to deliver a section of the project. The public sector must ensure state regulation within that project-specific partnership, and the private-sector concessionaire will definitely maintain their profit-oriented interest. As the partner in both the situations, because the private-sector concessionaire has the right to take decisions on behalf of JARDCL also, acting as the public-sector partner, there is a possibility that public interests may be compromised to a certain extent. Although one of the core actors assured me that nothing like that occurs and that they also look after

their partners' interests (Interview 11, August 2011, Jharkhand, India), such compromising decisions may also be taken subconsciously even if not intentionally. This could always raise questions about collusion.

#### **7.4.1.3 Second Vivekananda Bridge**

Unlike the other GQ projects, this particular project used PPP as a mode of delivery, as opposed to the traditional model, for two reasons. Firstly, there were restricted public resources available for the project; secondly, and most importantly, it was possible to adopt PPP due to the commercial and prestigious nature of the project, as it was located in the vicinity of India's third largest city, Kolkata Metropolitan Area (Interview 12, September 2010, Kolkata, India; CES, no date). Whereas the GQ policy document does not make mention about the use of PPP, project-specific reports and online information about this particular project recognise the use of the PPP model over the traditional model. As this project was one of the initial projects to use the PPP model, the project decision about the adoption of PPP was political in nature and there is very little information on this available in the public forum in terms of documents except the DPR. However, as the combined evidence of the DPR and interviews with core actors very clearly states the rationale behind the adoption of PPP, and the particular project is identified as using PPP even on the online databases of PPP projects in India, the mechanism to operationalise transparency is considered to be in place. However, this raises a question about event-versus-process transparency, following Heald and Hood's (2006) framework of categories, as the documents do not disclose the political nature of negotiation in enough detail. Considering this project was one of the initial projects to use PPP in India, such lack of documentation can be excused.

The next stage of decision-making is about the selection of the form of the PPP model. This project was contracted out on the BOT (toll) model. The BOT model was chosen as the most popular model in the road construction sector, as this model is found to be the most suitable in terms of the public and private sectors' risk distribution for public infrastructure. As this project was part of the prestigious GQ, proposed to be developed to improve port connectivity, and hence commercially viable, it was possible to invite bidders to make proposals on the basis of the toll model. As the DPR outlines the rationale for PPP adoption, the mechanism of transparency regarding the selection of the model can be considered to be in place. However, there is very little room for public

scrutiny of this decision, due to the commercial nature of the project and political bargaining during the decision-making.

Because this was one of India's earliest PPP projects, it was a single-bidder project. As one of the key informants remarked, the concessionaire agreement was not even well developed at this stage. The project became a learning process for both public- and private-sector actors on how to go about PPP. For this reason, it also involved vigorous contract renegotiation (Interview 12, September 2010, Kolkata, India). This is also substantiated by online information on the World Bank PPP website.<sup>51</sup> This evidence raised questions about the representation of transparency in partnership formation, which is met by the existence of selection criteria decided in advance and selection of the most suitable bidder. As there was only one bidder for the project, there was no possibility of selecting the most efficient of the potential contenders. However, the partnership formation still cannot be considered non-transparent, as bidding was invited in the public media from potential actors. However, this might raise questions about the competitiveness of the process and the selection of most efficient partner. In summary, in this case the partner was not chosen based on economic efficiency, but was chosen as the most attractive partner willing to take on the risk of carrying out this project. Considering the previous discussion on the private sector's perception of risk for this project, and reflecting upon the theoretical understanding of the PPP model – especially that partnerships are formed only when the private-sector partner is willing to take on the risk – no questions should be raised about the accountability of the model. However, following Chen and Hubbard (2012), this can also be explained in terms of unequal power relations amongst actors, as in this case the private-sector actor had the power to negotiate a contract to their own advantage, as there were no other bidders. In this case, 'power' is explained in terms of monopoly, even though the project is privatised. This might be explained through Chen and Hubbard's (2012) theory on the influence of power relations on risk allocation.

#### ***7.4.2 Stated purpose of transparency***

In the case of PPP adoption, the stated purpose of transparency – public-sector accountability – is met for all three cases, following UNDP's guidelines. There is a clear declaration of why PPP was adopted over the traditional model. In most cases, the rationale for adopting PPP is financial resource scarcity on the public sector's part,

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<sup>51</sup> <http://ppi.worldbank.org/explore/PPIReport.aspx?ProjectID=3614> accessed 20 June 2013

rather than PPPs offering better value for money over the traditional method. Reflecting upon Linder's (1999) classification of the neo-liberal versus the neo-conservative approach, it can be argued that the neo-conservative approach of PPP adoption is hardly taken into consideration. However, the neo-liberal approach may be said to be partially considered, as the public sector would not have delivered such infrastructure without private-sector participation. Hence, following Florini (2007), it also ensures the efficient use of resources, which is one main purpose of transparency.

#### **7.4.3 *Bigger purpose of transparency***

As decisions regarding the adoption of PPP and the forms of PPP to be used were mainly taken either politically or by market forces, the process itself did not provide any room for direct public scrutiny of such decisions. The only way to influence the political decision in this case is through the indirect method of voting. Hence, the bigger purpose of transparency is considered not to be met in this case. In Schedler's (1999) terms, this can be called an indirect form of accountability.

#### **7.4.4 *Barriers to transparency***

As the empirical evidence shows, in relation to transparency, market forces (in the selection of the form of PPP) and political authority (in the project decision) are considered barriers to transparency. The process of PPP adoption and selection of the form of PPP provides a good example of Chen and Hubbard's (2012) theory on power distribution between organisations and their conflicting interests regarding resource allocation. Such unequal power distribution can be considered as a barrier to transparency.

### **7.5 Partnership formation**

In relation to transparency in PPP, policymakers have mainly focused on operationalising transparency during partnership formation, as elaborated in Chapter 4. In fact, it is highlighted to a certain extent that a project is said to be transparent if the partnership has been formed through a transparent bidding process (3iNetwork, 2008). The sole purpose of a transparent bidding process is to combat corruption, to ensure that the private-sector partner is chosen based on efficiency and not for personal gain. Rosendorff *et al.* (2011) connect the concepts of democracy and transparency through



efficiency. It is important to ensure that in infrastructure-PPPs, the profit-oriented private-sector partners are invited not only to enter into the public infrastructure sector, but are also paid back from public money in the long run. Hence, it is also important to make sure that public interests are met in the decisions that are made. As in the previous sections, the mechanism of transparency, its stated and bigger purposes, and barriers to it are discussed below.

### **7.5.1 Mechanism**

At the partnership formation stage, the mechanism of transparency is considered to be in place if partners are chosen through a transparent bidding process. This means that if information about the criteria for the selection of the partner was available to the potential bidders ahead of time, the partners were selected based on those criteria, the information about the selection of the partner is documented and the documents are accessible by the wider population for public scrutiny, then the mechanism of transparency is considered to be in place. The following is the evidence from the three cases.

#### **7.5.1.1 Hazaribagh–Ranchi Expressway widening project**

Following the rules of transparency, the Hazaribagh–Ranchi Expressway widening project was awarded based on a transparent bidding process, where partners were selected on pre-defined criteria. It was mentioned on interview that bidding was invited through two English and two local newspapers, which listed the project detail and the selection criteria (Interview 01, August 2010, Jharkhand, India). Understanding the sensitivity of the topic and actors' feelings of being interrogated, they were not asked to provide documentary evidence. Hence, there was a rationale for the selection of the concessionaire and the information was available to all bidders. As mentioned by the core actors, IL&FS was selected from three prospective companies on the basis of delivering the lowest-cost bid (Interview 01, August 2010, Jharkhand, India). As discussed in theoretical literature, at this stage transparency is represented as the declaration of the previously determined selection criteria and the disclosure of information on why particular partners were chosen (UNDP guidelines, online).<sup>52</sup> Hence, the mechanism of transparency is considered to be in place. However, although

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<sup>52</sup> [http://pppue.undp.2margraf.com/en/08\\_2.htm](http://pppue.undp.2margraf.com/en/08_2.htm) accessed 1 June 2013

partners were chosen based on minimum project cost, which was the selection criterion as mentioned by the core actors, no information relating to the financial bids was disclosed to any public forum or to me (the researcher) on the grounds of confidentiality, even though I had acquired permission to access data from NHAI head office (the permission letter is enclosed in Appendix H). There was one condition on my permission letter issued by NHAI which said ‘as per RTI Act’, and the RTI Act 2005 exempts public-sector actors from disclosing any data that might jeopardise the private-sector actors’ confidentiality. Even though no separate request was made through RTI, it is to be noted that such information was restricted based on particular clauses in the RTI Act. This data confirms Siemiatycki’s (2006) theory on the private sector’s demand for confidentiality overriding the existing framework to operationalise transparency. As explained by the key informant, such financial information is of a highly confidential nature and cannot be disclosed to outsiders (Interview 01, August 2010; Interview 04, August 2011, Jharkhand, India). The clause in the RTI Act says:

Clause 8(d): information including commercial confidence, trade secrets or intellectual property, the disclosure of which would harm the competitive position of a third party, unless the competent authority is satisfied that larger public interest warrants the disclosure of such information.

(Right to Information Act 2005: 12)

As already described in Chapter 6, data on the Hazaribagh–Ranchi Expressway widening project was difficult to access. Permission was required from the head office in Delhi even to access public documents, or to talk to core actors informally. This additional round of seeking permission even to access ‘public’ information raises question about ‘transparency’ itself. Core private-sector actors from this project were much more suspicious of outsiders intervening in their daily courses of action than actors in state highway projects.

#### **7.5.1.2 Ranchi Ring Road**

In the case of Ranchi Ring Road, the first part of this section discusses the transparency of the formation of JARDCL. Due to the lack of documentation, data was mainly collected from interviews. As one of the key informants mentions:

1500 lane-km road has to be developed under Jharkhand Accelerated Road Development Programme. The Expression of Interest was invited on May 02, 2007. It was based on an open tendering process. The

purpose was to invite a Joint Venture partner. Six Expressions of Interests were received. IL&FS was the most conducive partner and was selected. The programme development agreement was signed between Govt of Jharkhand and IL&FS on February 6, 2008. Special purpose vehicle was formed. A technical sub-committee was formed to monitor progress of the project.

(Interview 08, September 2010, Jharkhand, India)

As in the Hazaribagh–Ranchi Expressway widening project, the private-sector actors were not asked to provide documentary evidence at the invitation to bid for similar reasons. The potential partners had access to the information on the selection criteria. As the above extract shows, there were six interested bidders and IL&FS was awarded the project on the basis of these criteria. As this was a formation of a partnership, the availability of information about the previously determined selection criteria and the disclosure of information on why a particular partner was chosen should ensure that the mechanism was transparent. In terms of transparency, as the interviewee was able to explain the detail of the tendering process of partnership formation, the mechanism of transparency was considered to be in place. Such information was not proactively available in the public domain in the form of a document, but was provided on interviewing the public- and private-sector core actors. However, this offered a very clear-cut rationale for the selection of the partner. On the other hand, this information was not immediately available to the public. At this stage, JARDCL in turn formed partnerships with different private-sector firms to deliver various segments of road. The delivery of the stretch of road considered for this study has also been achieved through this kind of ‘double-PPP’. In this case, the second level of partnership was formed with IL&FS to deliver a particular stretch of the Ranchi Ring Road. As this is the same private-sector company that forms partnerships with the state government RCD, the same people are involved both in management reform and in delivering the specific project. In relation to their motivation to form a PPP, this confirms Linder’s (1999) theory on management reform as key private-sector actors involved in the project were also key actors in JARDCL, and had the authority to take administrative action to support the accelerated advancement of the project. Such authority was otherwise restricted to the public sector only.

This new SPV, formed between JARDCL and IL&FS to deliver the Ranchi Ring Road, was named Jharkhand Accelerated Road Project Limited. As mentioned by the key informants, the concessionaire was selected through a transparent bidding process (Interview 07, September 2010, Jharkhand, India). Bidding was invited through two

local newspapers with information on the criteria for selection. As before, actors were not asked to provide documents as evidence. However, although the concessionaire was selected through a transparent bidding process favouring the lowest bidder, any financial information was considered highly confidential by key actors and was not disclosed, even for academic purposes to me. As transparency is represented as the declaration of the previously determined selection criteria and disclosure of information on why particular partners are chosen, here the criteria for transparency are only partly met. On this occasion, the relevant selection criterion was the 'lowest' bidder; however, the financial information on the 'lowest' bid was not disclosed, even to me. As mentioned above, even though no separate RTI request was made, the financial information was restricted to me on the grounds of clauses in the RTI Act. However, the names of the bidders were disclosed upon request, although it was required that they should be kept confidential.

Referring back to the RTI Act, although citizens have the right to access information on how decisions are made (Florini, 2007), in this case, seeking the reason this project was awarded to a specific concessionaire, a clause in the RTI Act also allows the private sector not to disclose any information that might be of interest to a third party and might harm their interests (Right to Information Act 2005). Following Siemiatycki (2006), this evidence confirms that PPPs face challenges in terms of transparency, as private-sector actors demand confidentiality for their business secrets. This shows how transparency was restricted in the case of partnership formation following Florini's (2007) definition:

Transparency refers to the degree to which information is available to outsiders that enables them to have informed voice in decisions and/or to assess the decisions made by insiders.

(Florini, 2007: 5)

Such restriction of financial information, and even the request to keep the names of the bidders confidential, might be considered as collusion, just because of the absence of availability of information to the public. In this case, such a perception of corruption is even stronger, as the same private-sector company formed the second layer of partnership. Hence, the restriction of financial information here leads to serious misunderstanding of the lack of transparency and even the impression of collusion between core actors.

This case provides an interesting view on lack of transparency. JARDCL is a joint-sector company between Jharkhand RCD and IL&FS. The second tier of the PPP is

formed between JARDCL and IL&FS. Hence, IL&FS is part of the contract-awarding company and also the winning bidder. As per UNDP's guidelines, in order to meet the criteria of transparency, when private-sector actors are bidding they must all 'be prohibited from involvement with those awarding the contract' (United Nations Development Programme, online).<sup>53</sup> Hence, even in the absence of any firm evidence on collusion or anything similar, this formation of second-tier partnerships raises question about the transparency of partnership formation. As per a critical realist approach, it can be argued that although the empirical evidence shows that the mechanism of transparency for partnership formation is in place, the system of collusion (in this case, the perception of corruption) exists in reality.

This stretch of the Ranchi Ring Road was contracted out on a BOT annuity basis. As the concessionaire agreement shows and as the key informants mention, highway projects are contracted out on a 'Build-Operate-Transfer on Design-Build-Finance-Operate-Transfer' basis (Interviews 01 and 08, September 2010, Jharkhand, India; JARDCL, year unknown). In theory, as these two models are separate forms of PPP, assigning various ranges of risks to actors, the term 'BOT on DBFOT basis' itself raises questions about the transparency of risk distribution amongst actors. Although, as Kalidindi (2006) would argue, projects are contracted out on the annuity rather than the toll basis because they are economically but not financially feasible, in the case of Jharkhand there are additional reasons for the private sector's unwillingness to opt for the toll model. As the actors were not confident about gaining returns from the project, and they found the toll collection method problematic due to the regional political disturbances and lack of rule of law and order in the state (Interview 08, September 2010, Jharkhand, India), they were reluctant to bid for the toll model. As the concessionaire director of Ranchi Ring Road observed:

... and because of the handling of cash, especially in the night time in a state like Jharkhand, there will be always risk of being loot[ed] at the night ...

(Interview 08, September 2010, Jharkhand, India)

Another key informant from the same project confirms that political disturbances in the region were one of the main reasons why bidders might not decide to put themselves forward for such projects. As one of the project managers said:

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<sup>53</sup> [http://pppue.undp.2margraf.com/en/08\\_2.htm](http://pppue.undp.2margraf.com/en/08_2.htm) accessed 1 June 2013

Government has tried to invite tender for Ranchi-Tata road on PPP basis. No one responded. This is due to the anti-social elements in the area. It is not a good place as workers might have life risk.

(Field note 03, August 2010, Jharkhand, India)

Although Thomas *et al.* (2003) have taken such issues into consideration on investment-friendly environments with regard to political disturbances, this has not been sufficiently elaborated. However, this case presents very context-specific data. As there is no proper documentation on such rationales to select the form of PPP, it can be said that there is no mechanism to operationalise transparency in place. In any case, one can potentially argue that this is an acceptable method for the selection of the form of PPP, as risk distributions are negotiated amongst actors, and hence, there might not have been any need for operationalising transparency. Moreover, considering the theoretical structure of PPP, it is obvious that no partnership can be formed if private sector partners are not willing to take the risk. Hence, negotiations over risk distribution and form of PPP selection can be considered very natural. However, as already identified in the literature, the declaration of concessionaire selection criteria assures transparency of the concessionaire selection process to other potential private sector partners that decision is made on a fair ground. Otherwise, they would be discouraged to spend time on submitting bid from next time.

#### **7.5.1.3 Second Vivekananda Bridge**

This subsection on the Second Vivekananda Bridge project discusses two stages of partnership formation being influenced by empirical data. The first stage of the partnership is formed between public- and private-sector actors; the second is the forming of a private-sector consortium (by the private-sector concessionaire). The second stage of partnership formation is common in all PPP models; however, this relationship is never discussed, as the private-sector consortium is formed depending on the private-sector concessionaire's business model, and hence, should not be the public's concern. As confirmed from the semi-structured interviews, this was a single-bidder project. Although the invitation to bid was announced through the media, the only bidder was awarded the project by default. For similar reasons to the other projects' bidding processes, actors were not asked to produce documents as evidence.

The first stage of partnership formation, which is very straightforward, raises the question about meeting the purpose of transparency, which is to select the most efficient

partner. Here, the contract-awarding company was not only bound to contract out the job to the only bidder, but also had to renegotiate their terms and conditions for the private-sector partner (Interview 12, September 2010, Kolkata, India). In this case also, although the empirical evidence supports transparency, in reality it is questionable.

In any highway-PPP project, there are actually two levels of partnership formation. The first is a public–private partnership and the second is a private–private partnership, where the private-sector concessionaire director forms a private-sector consortium. Whereas transparency in the first stage of partnership formation is widely discussed both in the literature and practice, and is one of the prime phases in which ‘transparency’ is discussed, the second stage, consortium formation, is barely addressed. It might be argued that, in the PPP model, the construction risk lies with the private-sector concessionaire (Bing *et al.*, 2005); and hence, the risk related to consortium formation would also lie with the concessionaire and is of little interest to the public sector in terms of their accountability to the wider population. As one of the key informants in this case observes, such information generally remains confidential, even from the public-sector partner (Interview 07, September 2010, Jharkhand, India).

Although it might be considered ‘non-transparent’, the formation of a private-sector consortium depends on the concessionaire’s business model. As the public-sector partner does not have any involvement in this process, and the private-sector partner is allowed to form the consortium in their own way as long as the share of risk lies with them, this is considered acceptable even according to formal procedures. As one of the key informants from this project mentions:

We haven’t picked up any partner from the market. We have negotiated it with our members. Each and every contractor has a shareholding with the company. It is permissible under BOT. I have picked up each contractor, design consultant and directly negotiated with them. There is no problem with that. This is the way partners were selected.

(Interview 12, September 2010, Kolkata, India)

This statement was even verified by another core actor of the same project (Interview 13, September 2010, Kolkata, India). Although this was a project-specific issue, it is anticipated that this procedure was also applied across other projects, as this project was one of those initial ones experimenting with the PPP model in India. Hence, it was also acceptable on the grounds that there were not many parties interested. However, this statement was also verified by another project director of NHAI from the Kolkata office

through informal conversation. He was not directly involved with this particular project as it was up to the private-sector company to form their own consortium as per their business plan. Although the data on the quality of this partner was mainly collected through interviews, this is considered valid, as their statements can potentially be used against them to accuse them of being ‘non-transparent’. However, as they mention, there is nothing illegal in this. As noted by one of the key informants, the private-sector firm bidding for such projects should have technical efficiency in the relevant field (Interview 08, September 2010, Jharkhand, India). Technical efficiency in a similar field should be the foremost criterion for choosing concessionaires, as invitations are extended to actors in this sector based on such efficiency. This would also confirm Linder’s (1999) theory on partnership formation as risk sharing.

... they have to be construction specialists; they can be in investment/promoting/infrastructure building experts. They also might be specialists like highway, bridge design consultants. It is very tricky to choose group members.

(Interview 12, September 2010, Kolkata, India)

However, since BOT (toll) models achieve returns of their project by directly collecting tolls from the users (unlike the BOT (annuity) model, where the public sector pays a fixed annuity amount to the private-sector partner, irrespective of the usage of the road), the concessionaires are expected to have additional qualities as entrepreneurs.

The main requirement from an entrepreneur to be involved in a PPP project is that the person should be purely developer like real estate developers rather than construction contractor. They should be able to make a business plan in terms of how to put their efforts and mobilize their resources. The entrepreneur should be able to analyse the risk elements of a project in the pre-development stage. They should have knowledge about certain solutions for the anticipated risks, should be aware about risk handling ways, and should know how to tackle risks. Otherwise, if they fail to figure out such solutions, then the project would not be viable ...

(Interview 12, September 2010, Kolkata, India)

### ***7.5.2 Stated purpose of transparency***

Due to the restricted transparency during the partnership formation stage, as I experienced, although theoretically projects are said to be ‘transparent’ for the purposes of the bidding process, the public-sector accountability of the decisions is, in general,



considered not to be met. The second stated purpose of transparency in this phase is to combat corruption. As UNDP guidelines on transparency in PPP show:

Transparency is also about preventing corruption by being open about government decision-making. Corruption means, for example, contracts being given to private firms who may not be suited for the job at the expense of other bidders and at the expense of the public, especially the poor. There are many incentives for private sector firms to engage in corruption. They may want to ensure that they are included in the list of bidders, whatever their merits. Alternatively, private firms could attempt to influence the terms for bidders, or they might simply attempt to be selected regardless of whether or not they are the most suitable bidder.

(UNDP, online)<sup>54</sup>

For example, with the Hazaribagh–Ranchi Expressway widening project, as the criteria for selection of the bidder was simply the lowest bid, people's lack of access to information on financial bidding might contribute towards the regional perception of collusion between core actors, irrespective of the fairness of the process. Hence, although the mechanism of transparency was in place, it failed to meet the stated purpose. Due to the hostility of the environment during fieldwork, it was not possible for me to approach other bidders to investigate the 'fairness' of the bidding process, which is often associated with the word 'transparency', as per representation of transparency, as already described in Chapter 4. Since these actors have a strong network, such an action might have been considered as interrogation of them. This could have potentially closed the case for me. I had already experienced this with the Hazaribagh–Ranchi Expressway case as described in Chapter 5. Moreover, as partners are selected based on the lowest bid, it might be argued that restricting people's access to such information is a violation of democratic principles because it restricts the public's ability to scrutinise decision-making (Florini, 2007; Sen, 1999). In addition, no information was disclosed on the formation of the private-sector consortium. In theory, as the private-sector consortium deals with its own share of risk, and hence does not involve the use of public money, it is not mandatory to make such information available to the public (Florini, 2007). However, in order to control the quality of the project, it is mandatory to monitor the subcontracting of projects, particularly in this particular region, with its history of a construction 'mafia' as described in Chapter 6. During the fieldwork, when asking about the subcontracting of projects, it was mentioned by core actors that projects were sub-contracted through a transparent bidding process

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<sup>54</sup> [http://pppue.undp.2margraf.com/en/08\\_2.htm](http://pppue.undp.2margraf.com/en/08_2.htm) accessed 1 June 2013

(Interview 04, August 2011, Jharkhand, India). As proof, they provided me with a list of bidders' names. However, again, any financial details regarding the subcontracting process were not disclosed, even to me, on the grounds of confidentiality, confirming Siemiatycki's theory (2007). Highway construction projects are capital-intensive, and as mentioned in the literature review section on corruption, one main way of using public money for private gain is to contract out projects to inefficient parties. Hence, this restricted transparency contributes towards the greater possibility of corruption, and hence, fails to meet the stated purpose of transparency. Irrespective of the rationales for respecting partners' confidentiality, Sen (2009) would argue that the instrumental role of transparency is restricted here at a project level, through the restrictions on people's scope to scrutinise public decisions, as would be desirable in deliberative democracy. Moreover, such restriction of information does not help the region to improve its image of corruption, which is one of the stated purposes of transparency within the context of India.

Moreover, due to the notorious history of national highway projects in the region, this information inaccessibility came to be recognised more as a 'lack of trust' issue rather than a 'non-transparency' issue (Field note 01, July–November, 2010; Field note 04, July 2011, Jharkhand, India). As discussed in Chapter 6, this mutual lack of trust between the developers of the project and the wider population can potentially arise from an exclusionary planning process, where such projects are of national importance but are planned without any consideration for the local population. This explanation goes against the representation of transparency by the UNDP guidelines on transparency in PPP, which say that transparency is about inclusion, not exclusion.

Transparency is about including, not excluding, all stakeholders; it is also about building awareness. Stakeholders might include: consumers, voters, labour organisations, bidders and the municipality itself. These individuals and groups need proper information about potential impacts, policies, partnership objectives and how partners will be chosen and contracted.

(United Nations Development Programme, accessed online)<sup>55</sup>

The same experience is also reflected in the case of JARDCL. Therefore, the stated purpose of transparency as an anti-corruption tool is not met here. Following the UNDP guidelines, as mentioned under representation of transparency, the restricted financial information has failed to develop trust amongst stakeholders. On a positive note, the

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<sup>55</sup> [http://pppue.undp.2margraf.com/en/08\\_2.htm](http://pppue.undp.2margraf.com/en/08_2.htm) accessed 1 June 2013

formation of JARDCL can be connected to the literature on relational contracts by Bakri *et al.* (2010), highlighting the significance of soft relations like trust, knowledge, sharing, cooperation and commitment to overcome the lack of inter-organisational knowledge flow.

### **7.5.3 *Bigger purpose of transparency***

Due to the restricted nature of transparency at the partnership formation stage, especially regarding the disclosure of financial information about bids where projects are awarded based on the lowest bid criterion, there is very little scope for public scrutiny of such decisions. Hence, transparency is considered restricted in the case of partnership formation. However, such a restricted form of transparency is legitimate under the legal framework in the context of India.

### **7.5.4 *Barriers to transparency***

Conforming to Siemiatycki's (2007) theory, the private sector's demand for confidentiality is identified as a major barrier to transparency for partnership formation. Moreover, such confidentiality is also institutionalised in the legal framework. For the case of the Second Vivekananda Bridge, the limited number of private-sector actors interested in bidding for projects can be considered as a barrier to transparency, especially in relation to contracting out the project to the most efficient partner. For the Ranchi Ring Road project, the fact that IL&FS was a part of JARDCL, who were in a position to contract out the project to IL&FS themselves, is considered a barrier to transparency according to UNDP guidelines. Although no firm evidence was available on collusion or any other form of bribery, UNDP guidelines say that the bidder should not be related to the bidding authority. Hence, following the critical realist approach, although the empirical evidence shows that the mechanism to operationalise transparency is in place, in reality it is possible that a system of collusion exists for a known bidder or a single bidder renegotiating contract terms and conditions. However, as no firm evidence was found on collusion, this study does not call it collusion.

## **7.6 Summary**

This chapter discussed the mechanism of transparency, its stated and bigger purposes, and barriers to it during the project decision, PPP adoption, selection of form of PPP,

and partnership formation stages from the collective evidence of three particular cases. Interestingly, while the literature on transparency in PPP is based upon whether PPPs are delivering projects with value for money, this is not even a criterion to measure transparency in the case of India. As there are restricted public resources to fund infrastructure delivery, adoption of PPP is a political decision, and is never questioned. In this case, the criteria for measuring transparency are whether there is a clear rationale for the decisions made securing public interest, whether such rationales are documented, and whether those documents are accessible by the population for public scrutiny. Selection of private sector concessionaire on the grounds of efficiency is an important aspect to measure the degree of transparency of a project.

As the evidence shows, although projects are mainly highlighted as transparent projects if they have selected partners through a transparent bidding process, in reality, transparency is legitimately restricted in the phase of partnership formation as far as transparency to the wider population is concerned (considering the mechanism to access information). The project decision and PPP adoption processes are more or less transparent as far as the disclosure of information is concerned. However, in this case, the information disclosure process is one-way and not interactive. Hence, the wider population has very little scope to directly influence the decision. Therefore, transparency is considered restricted in those phases also. The critical realist approach helps in understanding how the empirical evidence on mechanism of transparency may not reveal the real system of collusion amongst core project developers.

Finally, as the evidence did not demonstrate that the international development agencies' guidelines on good practices of transparency had been followed, it is important to discuss whether such practices serve a nation and a region well. As this study investigates transparency as a component of governance, beyond mere disclosure of information, to maintain hard-core accountability, it is argued that an underdeveloped region like Jharkhand would not have experienced development if the actors were challenged to adhere to this level of accountability. Soft relations like trust, openness and power play a significant role in development in this region, as private-sector actors are bound to take additional risks in investment. Finally, it is worth of mentioning again that better access to financial data on decision-making would have produced a richer analysis in this phase.

## **Chapter 8. Transparency in Phase II: Project Design and Land Development**

### **8.1 Introduction**

This chapter investigates the mechanism of transparency, its stated and bigger purposes, and barriers to it during Phase II: Project design and land development of highway projects under consideration. This study argues that decision-making in this phase should be transparent in order to ensure that public interests are protected in the decisions taken. Here, ‘public interests’ indicate that the public must benefit from the project and the affected communities must have information about the project and its implications for their livelihood, and informed consent about land acquisition for the project, even though this negatively affects their livelihood. Although prior studies focusing on transparency in PPP have not discussed transparency during land development, it was impossible to carry out research on ‘transparency’ from a critical social science perspective in the Indian context without addressing the transparency of the land development process (where land acquisition is a critical risk) as experienced by the wider population. The framework of accountability in PPP provides potential guidelines on how to operationalise transparency in this phase (Flyvbjerg *et al.*, 2003). Many authors including Flyvbjerg *et al.* (2003) have spoken in favour of facilitating public participation through the dissemination of project information to overcome the ‘democratic deficit’ in such projects. Project materialisation starts with land development, and a project first starts taking physical shape with land acquisition. During this phase, the affected population starts to understand the physical nature of the project and its tangible impact on their livelihood. In practice, land development overlaps with the planning and designing of the project, as the project design may have to change depending on the availability of land (Interview 08, September 2010, Jharkhand, India). Land acquisition is considered a critical risk in the Indian context by both public- and private-sector actors in PPPs. All these factors make Phase II significant in terms of transparency. As discussed in Chapter 4, the following set of questions is derived from the literature to assess the criteria of transparency during Phase II:

- a. Is the project information proactively disseminated amongst the wider population?

- b. Is there clear information about the exact impact of the project on individuals' property?
- c. Is there clear information about the basis for and amount of compensation offered?
- d. Is the information disclosed in a timely manner?
- e. Does the affected population understand the information effectively?
- f. Is there any window for them to express their concern?
- g. Was their feedback incorporated into the design?

**How are the stated purposes of transparency met?**

- Is infrastructure delivered in a corruption-free manner?
- Are the purposes of stakeholder involvement met?

**How are the bigger purposes of transparency met?**

- Is the rule of democracy/informed consent followed?
- Does it conform to equal treatment/the rule of social justice?
- Is a culture of openness created?

**What are the barriers to transparency?**

In this chapter, data is mainly used from the cases of the Hazaribagh–Ranchi Expressway widening project and Ranchi Ring Road. As the Second Vivekananda Bridge project was in its maintenance phase during fieldwork, it could offer little data for Phase II. It was not possible to gain access to the affected communities of the project, who had been rehabilitated a long time ago. This chapter investigates the mechanism of transparency, its stated and bigger purposes, and barriers to it in sections 8.2, 8.3, and 8.4 respectively. Unlike Chapter 7, in this chapter, particular cases are selected from the various projects to elaborate on a theme. As discussed in Chapter 6, the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (RTFCT) Act was enacted in 2013, two years after the fieldwork of this study was conducted. Although the empirical data does not reflect any implications of this Act, the anticipated change of conditions due to this Act is discussed in relevant places.

## **8.2 Mechanism of transparency**

This section explores the mechanisms of transparency in place during Phase II. For this phase, ‘transparency’ is defined as the disclosure of information about upcoming project design, the impact of the project on the affected population, and the process of offering compensation to facilitate a smooth rehabilitation process. This section also assesses the above-mentioned criteria for transparency. However, the criteria related to the purposes of transparency will be revisited under the section on that topic.

### ***8.2.1 Proactive dissemination of project information to wider population***

This subsection explores the ways through which the wider population get to know about upcoming projects. As citizens are voters and beneficiaries of the project, then, following UNDP guidelines, they must be considered stakeholders of the project. Hence, they must be informed about upcoming projects. Also, according to Rosendorff *et al.* (2011), citizens must be aware of efficient resource allocation through transparency. The public sector must proactively disseminate project information to citizens – who may also be beneficiaries – informing them about resource allocation. The empirical evidence identifies three ways that proactively disseminate information about the exact impact of project to the affected population.

#### **8.2.1.1 Stakeholder involvement during project design**

The first way of disseminating project information proactively to potential beneficiary communities is stakeholder involvement during project design. As evident from the Detail Project Reports (DPRs) of both Hazaribagh–Ranchi Expressway and Ranchi Ring Road, DPRs include a column on ‘stakeholder involvement’, which is employed during project design. This includes a visit to the site by the public-sector actors preparing or helping to prepare the report, taking notes of existing land use, and interacting with local communities discussing the upcoming project. This is one of the formal ways of informing people about an upcoming project during the preliminary project design and incorporating their concerns in the design and report (Detail Project Report, HREL, accessed in September 2010, Jharkhand, India). However, it is to be noted that at this stage, the project is at a very preliminary stage. Hence, local communities’ feedback is considered in terms of their general opinion about the proposed project. Local communities are mainly shown as beneficiaries of the project in

relation to this kind of ‘stakeholder involvement’. For instance, in the case of the Hazaribagh–Ranchi Expressway widening project, local communities were happy with the idea of a national highway project passing through their region, as it would bring development to the region (Interview 18, July 2011, Jharkhand, India). A ‘stakeholder involvement’ conducted at this stage hardly informs, or intends to inform, the affected communities about the exact impact of the project on their livelihoods. This is obvious, as the detail of the road geometry has not been worked out at this stage.

There is a mandatory chapter in the DPR on stakeholder involvement. The content of the chapter is not lengthy, and it generally includes some standardised text and a few pictures of the area showing project designers visiting the site and talking to local communities. An example is attached in Appendix I. While cross-checking the effect of stakeholder involvement through group interviews with a dissatisfied affected population from the Mandu area for the Hazaribagh–Ranchi Expressway widening project, it emerged that such a visit was not particularly effective in terms of their understanding the project’s precise effect on their living (Interview 19, July 2011, Jharkhand, India). As explained by them, this was due to the fact that project proponents visited the site two to three years ago during the initial project conceptualisation. At that point, the communities became aware of the planned widening of the road; however, neither the affected population were particularly concerned about the impact of the project at that point, nor, probably, had the surveyors any firm ideas about the exact road geometry (Interview 20, July 2011, Jharkhand, India). From the core project developers’ side, it can be potentially argued that the purpose of this ‘stakeholder involvement’ had never been to inform the affected population about land acquisition.

The new RTFCT Act 2013 would operationalise a formal method of informing the affected communities about the exact impact of the project on their livelihood through the proposed Social Impact Analysis, and consult them during the project design to finalise land requirements. This would set a very good example of a hybrid form of accountability (Goetz and Jenkins, 2001; O’Donnell, 1999) to assure more direct influence on the decision. However, it must be noted that this analysis would have to be run realistically and not as a rubber-stamp procedure such as an Environmental Impact Analysis.



### **8.2.1.2 Site visit during survey**

The second method of proactively disseminating project information to the potential affected communities is the surveyors' site visit. The communities learn about an upcoming project through the visit of a surveyor to measure the land during the project design (Group interview 01, July 2011, Jharkhand, India). This is organised by the state government Land Revenue Department (LRD) to cross-check the availability of land based on the preliminary design. It is an informal way to learn about an upcoming project. However, as key informants from the communities affected by the Hazaribagh–Ranchi Expressway and Ranchi Ring Road projects have mentioned, this is the most common and effective way through which communities get to learn about upcoming projects. Here, the surveyors from the state government LRD are simply the messengers. As the purpose of their site visit is to measure the land, they hardly ever ignore any potentially affected property. Those surveyors have the power to enter the property for measurement purposes, as per the National Highways Act 1956 and the Land Acquisition Act 1894. Those surveyors are also, upon request, able to provide a firmer view of the impact of the project on individuals' property (Group interview 01, July 2011, Jharkhand, India).

This way of informing people about the impact of a project on their livelihood is more robust and is integrated into the formal process of project development itself. Although this has been proved as the most effective way of informing the potentially affected population about the upcoming project, it is not a recognised mechanism of transparency in the literature.

However, this process of measuring the land and understanding a project's final impact on an individual property goes back and forth many times and is a lengthy process. There are two reasons for this. Firstly, as mentioned by one of the key private-sector informant, and also collected from field notes, information on the precise effect of a project on one's way of life might potentially get manipulated by land surveyors in the field under the influence of the affected communities. As such road projects offer a fair amount of compensation, affected communities try to influence the surveyors on-site to alter the alignment of the road to pass through their property as this brings them money, for which these property owners are willing to give up their property. As one of the key private-sector informants mentions, as surveyors are junior officers and are not well paid, they accept bribes and make alterations. As an example, he cites a 3–4 km stretch

of road, which has not been constructed as per drawing (Interview 07, September 2010, Jharkhand, India). Although this incorrect acquisition of land has been described as a ‘manual mistake’ and is supported on the grounds of lack of proper instruments, the key informant was confident of this being a case of bribery. Due to the sensitivity of the topic, any firm evidence on such corruption could not be gathered. One informant from the private-sector project office had mentioned informally that they receive phone calls from affected communities through personal contacts requesting that the road is aligned through their properties, as they are willing to give up their land for money. Hence, the land identification process gets manipulated in a bottom-up approach, as the junior staffs are more likely to accept the bribe. Affected communities, also being familiar with the culture, offer bribes. In the light of such a perception of corruption, in spite of its best intentions, it may be a challenge to strictly implement the RTFCT Act 2013.

Secondly, as understood from the core public- and private-sector actors, as these projects are contracted out on a BOT/DBFOT basis, private-sector actors have the freedom to redesign the project to incorporate private-sector skills (Interview 04, August 2011, Jharkhand, India). Moreover, as not all projects are detailed equally in the DPR<sup>56</sup> by the public-sector partners, or even by the external consultants, in some cases private-sector partners are required to work out the project details at a later stage. For instance, the DPR of Ranchi Ring Road offered a much more detailed design than that offered by the DPR of Hazaribagh–Ranchi Expressway (Interview 07, September 2010, Jharkhand, India). Such a change in design generates demand for new land in the advanced stages of the project. Hence, the site visit of local surveyors, based on the land identified at the preliminary stage, fails to capture this final information. In relation to this, it would also be important to carry out the Social Impact Analysis, as mandated by the RTFCT Act 2013, only after the final redesign and detail drawing has been generated and approved by the private-sector concessionaire, in order to avoid any mismatch between acquired land and identified land as per new design.

#### **8.2.1.3 Notification for land acquisition in public forum**

The third effective method of informing affected communities about the impact of an upcoming project on their properties is the notification of land acquisition in a public forum. As confirmed by communities affected by the Hazaribagh–Ranchi Expressway

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<sup>56</sup> Detail Project Report [Although it should be ‘Detailed’, as the exact name is taken from data, it has been kept ‘Detail’.

widening project, the main official procedure to disseminate such information is through the public notification of land acquisition in the area (Group interview 01, July 2011, Jharkhand, India). The affected communities are informed through the official public notification and two public newspapers. For the case of the Hazaribagh–Ranchi Expressway widening project, it was possible to access such notifications in public newspapers about land acquisition through one of the key informants from the community. Such notifications would be collected from a key informant; an example is enclosed in Appendix I. This way of informing people is most effective and robust, as the schedule of land acquisition includes all affected property owners' names. In addition, as individual notices are sent to property owners, it is hard to miss the information.

Moreover, at times, public meetings are organised to answer the individual queries of affected communities. For example, affected communities from Mandu mentioned that public-sector officials held a meeting at a local meeting point with prior notification to satisfy the affected population through a face-to-face meeting to clarify any project-related information (Group interview 01, July 2011, Mandu, Jharkhand, India). This meeting was held during the project design stage. However, they claimed that the public-sector officials were incapable of producing exact information on particular issues, even upon request. Hence, in this case, although the mechanism of operationalising transparency was in place, it was not completely effective. One of the plausible reasons for this is that as the project was at a design stage, the exact final information about the project did not exist.

### ***8.2.2 Proactive dissemination of information on exact impact of project on affected population (individual landowners)***

This subsection identifies ways that proactively disseminate information about the exact impact of a project on the affected communities and their livelihoods, and is therefore concerned about accurate project information in terms of the precise layout and geometry of the road, the precise geometry and area of the land to be acquired from individual property owners, and the timely availability of such information to potentially affected individual owners. I argue that this is important in relation to risk management where this becomes difficult, as the end users are not considered in the equation (Roumboutsos and Anagnostopoulos, 2008), as discussed in Chapter 2. Here, affected communities must be considered in the land acquisition risk as they

significantly contribute towards managing this risk by giving consent to land acquisition and being rehabilitated.

As discussed in Section 8.2.1, site visits during the survey and notifications of land acquisition in public forums are the two most effective ways of disseminating information about the exact impact of the project on someone's property. The affected communities also confirmed in their group interview that they did not have precise information about land acquisition for the road-widening project until and unless the survey staff came to finally measure the land for acquisition (Group interview 01, July 2011, Mandu, Jharkhand, India; Group interview 02, August 2011, Ramgarh, Jharkhand, India). Specific cases are presented from various stretches of the Hazaribagh–Ranchi Expressway widening project and Ranchi Ring Road below.

Group interviews with affected communities on the Mandu stretch of the Hazaribagh–Ranchi Expressway widening project reveal that the communities mainly learned about the impact of the project on their property through surveyors and individual notification by the National Highways Authority of India (Group interview 01, July 2011, Mandu, Jharkhand, India). On the measurement of land, individual property owners generally receive a letter from the Department of Land Surveys indicating the measurement of land to be acquired for the public purpose of construction of a highway is to be carried out in a few days. An image of such a letter is included in Appendix I. In relation to compensation, it also says that if the compensation offered is not accepted by the deadline, it will be deposited in the public treasury. This indicates that the land will be acquired in any case, irrespective of the acceptance or not of compensation.

In terms of the exact impact of the project on the property, the notice contains information about the measurement of land, in terms of area, to be acquired. As local people have mentioned, the land revenue staff first measured the site, then prepared documents in their offices, and informed the affected people about the impact of the project on their property in written form (Group interview 01, July 2011, Mandu, Jharkhand, India). The landowners sometimes found this information to be inaccurate. On asking how they recognised that the measurement information was inaccurate, they commented that, in the first place, everyone has some idea about what kind of property they own. Secondly, the landowners asked the surveyors about the measurements while they were carrying out their work. They recognised the written information to be inaccurate when they found the verbal and written information did not match up (Group

interview 01, July 2011, Mandu, Jharkhand, India). Figure 8.1 shows an image of a site visit at Mandu.



Figure 8.1: Visit to the Mandu area and meeting affected communities

Source: Observation 04, July 2011, Jharkhand, India

Where the landowners are dissatisfied with the measurements, they may request that the surveyors revisit the site, even though this makes the process time-consuming. In some instances, they can revisit the site up to three times for measurement. As many local people complained during the group interview, the interaction process between landowners and the LRD was very slow, and the process was quite lengthy and complicated. Therefore, for a long time, while people knew that they would be affected by the project and their property would be taken, they did not have any clear idea about when and how (Group interview 01, July 2011, Mandu, Jharkhand, India). This indicates a delay in the dissemination of information, leaving the potential affected communities in anxiety.

The case of the Ramgarh bypass also presents evidence in support of such dissemination of knowledge. This case was part of the Hazaribagh–Ranchi Expressway widening project (as mentioned in Chapter 6). As described by the affected communities: in spite of the absence of any formal procedures, they got to know about upcoming project at this stage from LRD staff, who visited the site for the survey and brought news of the upcoming project and the possible dislocation of communities. However, although they came to know about the project, information about the exact effect of the project on

their livelihoods was not available at this stage (Interview 21, August 2011, Jharkhand, India). This was also confirmed from a group interview with actors (Group interview 01, July 2011, Jharkhand, India). Moreover, the local communities were told that this was just one of three alternative alignments. Hence, the community did not have any information about whether they would definitely be affected by the project and how; and, for this reason, they did not pay too much attention to it (Group interview 03, August 2011, Ramgarh, Jharkhand, India). Information on the three alternative alignments was also cross-checked by core document analysis (Document 01: National Highways Authority of India, Ranchi, India, 2010). This proves that there was a lack of precise information available to the potentially affected communities about the impact of the project on their way of life that could have permitted their concerns to be understood in good time. Finally, when the affected communities came to know about the exact impact of the project, not only on their properties but also on their livelihoods – as it would take away their all-year-round fertile farmland, which was their main economic base – the road alignment could not be altered at that stage as this might jeopardise the geometry of the road. Hence, the affected communities were desperate, without any opportunity to express their concern, and seized the instruments the surveyors were carrying. While the implication of this whole event will be revisited and analysed in section 8.3.1 on stakeholder involvement, it can be stated that the affected population were not informed about the precise effect of the project on their living until very late on when no alteration could feasibly be made.

As the Hazaribagh–Ranchi Expressway is a national highway project, according to the National Highways Act 1956, it can be argued that central government has the power to acquire the land on the grounds of public purpose. However, Florini (2007) and Sen (1999) would potentially argue that the purpose of transparency in a democracy is to meet ‘informed consent’. Hence, although land can be potentially acquired for public purposes it must also have the affected communities’ informed consent. This makes the process of land acquisition important, in addition to the end result. In this phase, this ‘informed consent’ should be reached through transparency between project developers and the affected population. The issue of ‘informed consent’ will be discussed in detail in Section 8.3.2.

The RTFCT Act 2013 is definitely expected to improve the situation, firstly, by informing affected populations about projects and carrying out Social Impact Analyses, and secondly, by prioritising food security, and hence, empowering the Department of

Agriculture to have a stake in the case. However, one crucial point is that the new Act demands at least 70% of the affected communities' 'informed consent' for land acquisition. Hence, if a substantial number of affected people, but less than the balance of 30%, refuse their consent, then there is still a possibility that critical objections will be ignored.

Evidence from Ranchi Ring Road shows the fact that the affected population mainly learns about the exact impact of a project on their livelihoods through the notification from the state government (Interview 22, August 2011, Tupudana, Jharkhand, India). An image of such an order from the government showing the measurement of land to be taken and amount of compensation offered is enclosed in Appendix I.

However, the process of land identification and acquisition was more haphazard and unsystematic in case of state highways. Some other communities reported that they were not issued with any letter or were not even sure of the effect the project on their way of life until a very advanced stage of the project. Moreover, at times, being worried about the upcoming project, they had to proactively approach the engineer to understand the exact impact on their property and request adjustments. Interviews with another community at Lalgutua, who were affected by the Ranchi Ring Road project, show that communities are not even informed about the precise nature of the effect on their livelihoods until a very advanced stage of the project, when the project design can hardly be changed (Interview 26, August 2011, Lalgutua, Jharkhand, India). This data is supported by my observations on-site. However, although they had not been notified about the impact of the project, they understood that it would entail the loss of their property on both sides of the new structure. As one of the key informants from the affected community by the Ranchi Ring Road expressed it:

We would be homeless and jobless. We just want government to let us know in advance. Let us know the amount of compensation and profile of land to be taken. Now we are hearing this for long and we are scared that all of a sudden we have to leave. We are not sure where to go. Price of land and construction is increasing day by day. Now if they would have settled the matter last year, we could have bought lands cheaper. Even I want to build house like this for my family. I also want them to be settled. And we understand government will take land anyway, at their own price. It would be better for us to move things faster as it will be unaffordable for us.

(Interview 26, August 2011, Lalgutua, Jharkhand, India)

However, communities continue to gather visual information from their surroundings during the project materialisation stage, and anticipate its impact on their living, based on their prior experiences (Interview 25, August 2011, Tupudana, Jharkhand, India). Yet the population continued to be unaware of the exact influence of the project on their way of life, as no formal notification was given to them right up to the advanced stages of materialisation. As there were implications for their property, housing and economic base, they lived with constant anxiety and uncertainty at that time. As mentioned by the key informants of the community affected by the Ranchi Ring Road:

But we are uncertain about what exactly will happen and whom to approach to know. I feel trapped where I can see every day that the construction will take my home but not sure at what cost and what will happen. I am just a food hawker. I don't have any other job now. This way I will be homeless and jobless.

(Interview 26, August 2011, Lalgutua, Jharkhand, India)

According to the key informant, as the state government road developers have been sympathetic to neighbouring communities and altered the project's alignment to avoid them forfeiting their properties, this informant also hopes that their own concerns will be taken care of in the decision (Interview 26, August 2011, Lalgutua, Jharkhand, India). Moreover, the two quotes above also disclose what sort of information (at least) affected communities would like to have: 'profile of land to be taken, and exact amount of compensation', as these would guide them in deciding on their future occupations. In addition, they would also like to have information on 'whom to approach to know exactly what will happen and when'. This also provides a guideline for what kind of information must be disclosed in order to obtain informed consent even in terms of the basic definition of transparency as 'disclosure of information'. In terms of 'informed consent', the communities continue to develop positive expectations, depending on their prior experience. As one of the key informants from the community affected by the Ranchi Ring Road states:

... He pointed us towards some construction work going on at a distance and then pointed the huge construction work on the other side, and then made a connecting line by hand in the air to show that see, this is how the road will go .... "Look at that house, before it was sacrificing almost four columns, but now, after the person spoke to the contractor, it is sacrificing only one. They have changed the geometry of the road a little to save the structure. Also, if you keep on going inside, we heard that the



contractor has changed the road profile a little to save some structures. We are also hoping that they would even listen to us”.

(Interview 26, August 2011, Lalgutua, Jharkhand, India)

While the issue of ‘informed consent’ will be analysed under the section on the purpose of transparency, this section shows that affected communities have had different experiences with information on the precise nature of the project on their livelihoods, and at times, such information was unavailable to them until very late on in the project.

### ***8.2.3 Proactive dissemination of information on exact amount of compensation in a timely manner***

This subsection provides evidence to examine whether information about the exact amount of compensation available, including the basic compensation rate, was presented to the affected population in a timely manner, and whether their complaints and legal cases were dealt with in time, before the acquisition of their property and demolition of their houses.

First, there is evidence showing the way the affected population is informed about the amount of compensation offered. There are generally three important categories of such notifications. These are the measurement of land to be acquired, the amount of compensation offered and the deadline for accepting compensation. Two examples, from the Ranchi Ring Road and Hazaribagh–Ranchi Expressway widening project, are included in Appendix I.

In the Indian context, land acquisition for road construction is inevitable, as it is defined as a public purpose. It is only on the grounds of the amount of compensation on which the affected communities are able to negotiate. The RTFCT Act 2013 is expected to at least improve the situation by introducing the Social Impact Analysis and ensuring that the bare minimum number of houses are demolished for land acquisition. The notifications mentioned above state that the amount of compensation offered must be accepted by the given deadline; otherwise, the compensation goes to the public treasury. Hence, the affected individual either accepts the money, or does not receive any money but loses the land anyway. The language of the letter follows a strict top-down approach. However, although not mentioned in the letter, affected communities are recommended to file legal cases in case they are not happy with the compensation offered. The authorities even send a reminder and a second chance to accept the offered

compensation by a given time. An example of such a letter is also included in Appendix I.

However, mandatory acquisition of land and demolition of structures on that land for the purpose of national highway construction is also the norm. A letter giving evidence for this can also be found in Appendix I. As learned from a local contact, the community in the Mandu region affected by the Hazaribagh–Ranchi Expressway widening project were agitated by the overall land acquisition process and especially unhappy with the compensation offered during the fieldwork for this research. A group interview was organised in the region to understand the compensation disbursement process in general and to learn why the communities were dissatisfied. The data presented under this section is mainly taken from the group interview (Group interview 01, July 2011, Mandu, Jharkhand, India). One of the key informants from the public-sector partner also referred to this area as particularly problematic, as work could not be progressed because there was some resistance to the compensation disbursement process (Field note 03, July 2011, Jharkhand, India). As informants confirmed in the interviews, the affected communities came to know about the extension of the road in the course of the LRD's measurement survey. However, they were not provided with any concrete information on exactly what part of their property would be appropriated, at what cost, and on what basis. Hence, this provides evidence in terms of what should constitute the information required, even if 'transparency' is basically defined as 'disclosure of information'. Moreover, some of the key informants mentioned that while they received notifications informing them about the compensation offered to them, they were not given any idea how such compensations had been calculated (Group interview 01, July 2011, Jharkhand, India). As they stated, they tried to collect data on the compensation rate from the local court in order to verify the rate they had been offered. One person showed us a piece of paper with a table. This is included in Appendix I as evidence.

First of all, as there was no official stamp on it, other participants of the interview discarded the legitimacy of such information. Secondly, as there are many categories, they argued about how the surveyors would have considered their building. However, it was evident that the allocation of compensation was done on an *ad hoc* basis. Irrespective of whether the surveyors calculated the compensation on any basis, the affected population had no information about it. They were not even sure whom to approach for further information (Group interview 01, July 2011, Jharkhand, India).

There is another instance from the same region in the same case, which provides evidence of the non-transparency of the system in terms of discriminatory treatment. During the group interview with an affected community group in the region of Mandu, the group related a case involving three brothers. On part of the road that was to be widened for this project, three brothers each had a property; the three properties were identical in terms of the kind of house, plot size, and structure. Although each held the same amount of land and the same built structure, they received, respectively, Rs. 24, 22 and 2 lakhs as their compensation allocation (Group interview 01, July 2011, Mandu, Jharkhand, India). As the group related, in this region there is a norm of offering bribes to surveyors who visit the site; this is a matter of mutual understanding between junior government staff and property owners. However, because the third brother in this case refused to bribe the surveyors, he was offered little compensation in comparison with his two brothers (Group interview 01, July 2011, Mandu, Jharkhand, India). Figure 8.2 below shows the location of the group interview in Mandu.



Figure 8.2: The location of the group interview with the Mandu community

Source: Photo taken during group interview 01, July 2011, Jharkhand, India

While it was not possible to gather any concrete information on this case by letter or even by talking directly to the people in question, the statement above indicates a shared understanding of transparency and corruption in the region. This contrasts with Heald and Hood's (2006) definition of transparency, in that local communities face unequal *ad hoc* treatment by surveyors and road developers; thus, the system can be considered to be non-transparent. In this situation, the criterion for non-transparency is the treatment of people in a discriminatory way. This also contributes towards people's perception of

corruption in the region. It nevertheless remains the case that people may still receive equal treatment, but only where an appropriate rationale exists. Hood (2006) states that:

... good governance depends on the skilful and intelligent use of discretion on a case-by-case basis by professionals or morally upright rulers.

(Hood, 2006: 6)

The next step in the land development process is that dissatisfied landowners get the right to file a legal case. Ideally, no land acquisition should take place until the case is closed. However, in reality, land is acquired and buildings are demolished while cases are still pending. An extract from the field notes records the case of a property owner affected by the Hazaribagh–Ranchi Expressway widening project,

... whose house was partly demolished. He said the same story. He came to know about this when it was being surveyed. He received notice through newspaper and then a letter with compensation value. He wasn't happy with the compensation, has sued a case. He has already received a notice for demolition without resolving the compensation issue. He wasn't happy with the timing of the process, he thought it was delayed.

(Interview 19, July 2011, Jharkhand, India)

The experience of helplessness as recorded in the private-sector informant's story is also reflected in other research field notes based on a different site visit. As described in the field notes:

Some scenarios I came across. I felt extremely inhuman to take pictures. I have attempted to make a sketch on the basis of the picture I captured in my memory. There are low-rise structures of very low quality but permanent material on both sides of the road. They were demolished. However, the only part that was coming in the right of way (ROW), was demolished. Hence, there are half-broken low-rise remaining structures on the both side of the road with exposed brick and cement. There are bulldozers lying there, which are demolishing the houses. People have gathered at the site around the bulldozers. Some are curious to see how this is working, some used to be property owners, who have received compensation for selling their property, willingly or unwillingly, and now they are standing there to see how their houses are being demolished. Some of them are trying to make sure that government is not taking more than what they have paid for. Since houses are being demolished from the ground, the ground now has a rough muddy form. There are people from road builders who are levelling the ground, preparing the land for road construction. They have happy expression on their faces, satisfying with the job they have got to do. There are people from the community lining up along the construction site. Some are curious to see how such a huge development process taking place and

some are clearly unhappy as their land was taken without their consent and now it's a funeral for them! One's resource is taken for another.

(Field note 04, August 2011, Ranchi, India)

Figure 8.3 below shows the demolition of houses for the upgrade of the Hazaribagh–Ranchi Expressway.



Figure 8.3: Land preparation for road widening along the Hazaribagh–Ranchi Expressway

Source: Field note 04, August 2011, Jharkhand, India

#### ***8.2.4 Reactive dissemination of project information: RTI Act***

As evident from the Government of India website, and interviews with core actors and affected communities, the Right to Information (RTI) Act has been in place in India since 2005 as a mechanism to operationalise transparency in a reactive way. The Act is defined as:

An Act to provide for setting out the practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, the constitution of a Central Information Commission and State Information Commissions and for matters connected therewith or incidental thereto.

(Right to Information Act, 2005: 5)

Although core public- and private-sector actors confirm the existence of this Act which compels them to disclose information, local people's awareness of this Act and its strict implementation is not very high. Hence, although empirical evidence about the RTI Act shows that the mechanism to operationalise transparency is in place, the triangulation of

data through interviews with the affected population shows that the implementation of RTI Act is problematic. Evidence from both the Hazaribagh–Ranchi Expressway widening project and Ranchi Ring Road show local people’s lack of awareness about their right to demand information through this Act. For instance, the affected communities from Mandu and Tupudana were unaware of such an Act (Interviews 23–25, July–August 2011, Jharkhand, India). Interviews with communities affected by the Hazaribagh–Ranchi Expressway widening project show that the administrative process to access information regarding the compensation base rate was lengthy, time-consuming and complicated (Interviews 17, 18 and 19, July 2011, Jharkhand, India). In the literature, such features are viewed as ‘methods of resistance’ to information disclosure:

... policy makers have strong incentives to find ways of evading disclosure requirements. Reluctant to absorb the political costs associated with an overt challenge to these requirements, policy makers may rely instead on less easily detected methods of resistance, such as adaptation of bureaucratic routines for record keeping or processing of FOI [freedom of information] requests. For advocates of transparency, a degree of vigilance regarding the FOI process itself is therefore required.

(Roberts, 2000: 122)

As few key informants from the local communities related, in cases where the affected population enquires about details relating to the project, it takes so long that they give up any hope of getting a response (Interview 17, July 2011, Jharkhand, India). In one reported case an individual wanted to verify the rate offered for his property, but after six months he still had not received any reply. As recounted by a third party:

He mentioned that he is not sure whether he is getting the correct rate. He has filed an application with RTI [Right to Information] seven months back asking for the correct rate and his inquiry hasn’t been answered yet.

(Interview 17, July 2011, Jharkhand, India)

These practices have a background context. They are, however, recognised in the literature as barriers to the implementation of the RTI Act, but as intentional ones to resist the flow of information, rather than simply being the slow grinding of the bureaucratic machinery:

The second, less easily observed but perhaps more important, consists of informal administrative responses, which while maintaining a public

pretence of conformity to the law, have the effect of limiting its significance in practice.

(Heald and Hood, 2006: 109)

However, based on the evidence from interviews with local communities on their experience of accessing information on highway projects, in particular on its relevance to their livelihoods, people are dissatisfied with the implementation of the RTI Act. This again reconfirms that people have restricted access to information, questioning the existence of transparency, even following the basic definition of 'disclosure of information' in reality. This confirms the theory of Freedom of Information (FOI), which indicates that a harmonious relationship between governments and the governed is unlikely to be realised by the mere implementation of the RTI Act:

FOI [freedom of information] law is expected to produce a new and more harmonious relationship between officials (who give up practice of questioning why citizens should need access to information) and citizens (who reciprocate by placing greater trust in those officials). The central point of this chapter is that a happy outcome is unlikely to be achieved.

(Roberts, 2000: 122)

Moreover, key informants in this study have reported having very little trust in the RTI Act when it comes to requests for information (Interviews 17 and 20, July 2011, Jharkhand, India). This also shows that the mere implementation of the Act (or lack of it) does not automatically improve people's trust in the system. This again confirms Hood's (2006) perception of there being little correlation between FOI law and the improvement of trust in society:

In practice, the probability that the adoption of an FOI law will lead to cultural change or improve trust is small ...

(Hood, 2006: 108)

In addition, as mentioned in Chapter 6, there are additional reactive tools to operationalise transparency like the Citizen Charter and the Lokayukta of Jharkhand to collect information on such issues as land acquisition and compensation. However, no evidence on such tools was available from the affected communities. It is anticipated that, like the RTI Act, there is very little public awareness about such tools in Jharkhand. The government website itself indicates such possibilities.

### 8.3 Purpose of transparency

#### 8.3.1 Purposes of stakeholder involvement

Subsection 8.2.1 has already very briefly discussed ‘stakeholder involvement’, which is a mandatory part of the DPR. This section discusses the purposes of stakeholder involvement as elaborated by Flyvbjerg *et al.* (2003) in relation to large-scale infrastructure, and which is identified as an integral part of project design to facilitate public participation. In the case of Ramgarh bypass, this subsection investigates what happens when the purposes of stakeholder involvement are not met. Ramgarh bypass, a stretch of the Hazaribagh–Ranchi Expressway widening project, has already been described in Chapter 6. As identified from the empirical data, the population affected by Ramgarh bypass were agitated with the land acquisition process (Interview 21, August 2011, Jharkhand, India). Being influenced by the empirical data, this section selects the case of Ramgarh bypass to investigate whether the purposes of stakeholder involvement were successfully met in this case.

To discuss stakeholder involvement, it is important first to identify those who are legitimately counted as stakeholders. Here, the affected population did not only need to be relocated to make way for the project, but their economic base was affected as the project acquired their farmlands (Interview 21, August 2011, Jharkhand, India). As verified both from field notes and a group interview, the conflict regarding land acquisition in Ramgarh started as the National Highways Authority of India (NHAI) required the agricultural land, which was fertile throughout the year (Interview 21, August 2011, Jharkhand, India). As El-Gohary *et al.* (2006) argue:

Stakeholders are individuals or organisations that are either affected by or affect the development of the project. Therefore, capturing their input is a crucial component of the project development process.

(El-Gohary *et al.*, 2006: 595)

In this case, as these communities were affected by the development projects in question, both in terms of being displaced from their current location and of losing their economic base (fertile agricultural land) (Group interview 02, August 2011, Ramgarh, Jharkhand, India), according to El-Gohary *et al.* (2006) they must be considered ‘stakeholders’ and, hence, their input and concern regarding the impact of the project on them must be incorporated into the project development process. Generally, project beneficiaries are considered stakeholders of the project as they have a positive ‘stake’ in



project. Hence, one might raise questions about considering affected populations as stakeholders as they are not direct beneficiaries of the project. However, in addition to the above definition by El-Gohary *et al.* (2006), it is to be noted that this ‘stakeholder involvement’ is discussed as a mechanism to achieve transparency through the two-way flow of information by Flyvbjerg *et al.* (2003). Hence, the central subject of discussion here is ‘transparency’. According to the United Nations Economic and Social Council (ECOSOC), ‘citizens are beneficiaries of transparency’. Following the logic of ECOSOC and the central argument for transparency in this thesis, that is, protecting public interests in the delivery of public infrastructure, I strongly argue for the affected population to be considered as stakeholders in the subject of investigation. As per the new RTFCT Act 2013, both the landowners and those people depending on the land for their economic base are considered to be the ‘affected population’. Moreover, the mandatory Social Impact Analysis for land acquisition, to be conducted in consultation with the potentially affected population, can be considered as the opening to facilitate a two-way flow of information. Hence, this Act is expected to improve the situation. However, such an analysis must be run based on the final design of the road, to reflect the actual land requirement. Therefore, it would be crucial to decide upon the timeline of the analysis; it must be run after the project has been redesigned and detailed by the private-sector concessionaire. The following is a discussion of whether the rationales of stakeholder involvement were fulfilled in this particular case.

#### **8.3.1.1 To incorporate feedback**

The first rationale of stakeholder involvement is to incorporate stakeholders’ feedback in decision-making. Following El-Gohary *et al.* (2006):

The main aim of involving the public in the planning and design phases of the project is to inform stakeholders and obtain their feedback regarding the most suitable design for a project. The process is usually a two-way process.

(El-Gohary *et al.*, 2006: 596)

Hence, as recognised in the literature, this section elaborates that there should be a three-step process in order to disclose project-related information to the public and to incorporate their feedback in decision-making, as shown in Figure 8.4 below. Firstly, precise information about the project should be available in the public forum, at least to stakeholders, as suggested by Flyvbjerg *et al.* (2003). Secondly, there should be

mechanisms to facilitate a two-way flow of information, so that feedback from stakeholders can be collected, as recommended by El-Gohary *et al.* (2006). And thirdly, this process should take place in a timely manner, in order to incorporate the feedback into the decision-making, as advocated by Flyvbjerg *et al.* (2003). In the case under discussion, Ramgarh bypass was proposed as one of three alternative alignments for this road-widening project. Evidence shows that the existing top-down planning approach does not follow those three steps for incorporating feedback into decision-making.

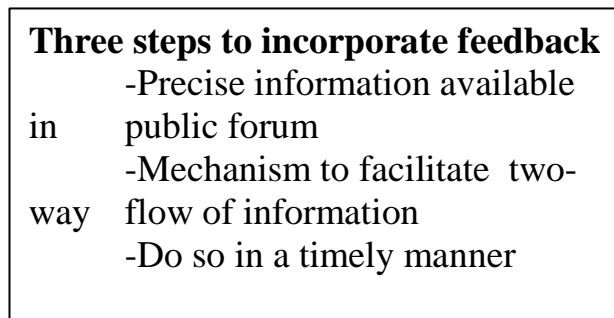


Figure 8.4: Three steps to incorporate feedback

Source: Author

#### ***Step I. Lack of information in the public domain***

As already discussed in sections 8.2.1 and 8.2.2, no project information was available in the public domain. Although the local population were generally aware of Ramgarh bypass through word of mouth, as mentioned by one of the key informants from the affected communities, there was no announcement in public forums regarding the project. Moreover, the potentially affected population did not have any idea of the exact nature of the project, its precise impact on their way of life, and the amount of compensation offered until a very late stage (Group interview 02, August 2011, Ramgarh, Jharkhand, India). At that point, there was very little scope to make any alteration, as this would have disturbed the geometry of the road. With the new RTFCT Act 2013, it has become mandatory that information about a project and its impact on affected communities must be made available in the public domain.

#### ***Step II. Lack of a scheduled forum for two-way information flow***

Unavailability of a forum for a two-way flow of information was the next constraint in facilitating incorporation of feedback in this case. As mentioned, although the affected

communities came to know about the project over the course of visits by the LRD staff to measure the site, this information was conveyed to them in the form of an ‘order’ from higher authority (Group interview 02, August 2011, Ramgarh, Jharkhand, India). As mentioned by a key informant from the affected community, with a top-down planning approach the affected communities feel powerless to lift their voices against those who govern them (Group interview 03, August 2011, Ramgarh, Jharkhand, India). Many informants from the affected communities confirmed this statement. This firstly confirms that, here, ‘disclosure of information’ about the project is power-influenced; this means that information is only given out once decisions have already been made, and the recipients have little power to challenge them. Hence, power is identified as one of the key barriers to transparency. This will be discussed in detail below in subsection 8.4. Secondly, it also shows that the top-down planning approach does not provide any mechanisms through which the wider population can voice their concerns regarding the impacts of the project on them, particularly in such a way that the input can be incorporated in the planning/design to serve their interest. However, with regard to stakeholder involvement, as Flyvbjerg *et al.* (2003) would argue,

Feedback from participating groups should be actively used in the feasibility studies and in the decision making process, including a constructive role for the groups in defining the major requirements to be taken into account in the technical, environmental and economic design of possible projects.

(Flyvbjerg *et al.*, 2003: 112)

Hence, according to Flyvbjerg *et al.* (2003), the top-down planning approach, especially in the case of national highway projects, does not provide any mechanisms for the stakeholders to contribute their feedback to the decision-making. Information about decision is disclosed at a stage when firm decisions have already been taken. As identified by the members of the public interviewed, although the state government LRD is contacted by the road developers to communicate with local communities during the DPR’s preparation stage to verify the status and availability of the land: this is generally transmitted in the form of an ‘order’ from the central government to evacuate the land at a later stage, because the national highway is a prioritised project (Group interview 03, August 2011, Ramgarh, Jharkhand, India).

However, DPRs of such projects generally have a chapter on ‘data collection’, which generally claims that the project developers, mainly from the public sector, interact with the public during the project design stage (Document 11: Detail Project Report,

Hazaribagh–Ranchi Expressway, accessed in August 2010, Ranchi, India). Such chapters generally also include pictures of public-sector staff collecting data. On the basis of such evidence, core public-sector actors claim to incorporate public participation into the design stage of the project. However, the affected communities – in this case, the population affected by Ramgarh bypass – disagree that such actions actually take place (Group interview 02, August 2011, Jharkhand, India). Hence, we interpret this to mean that project developers interact with the wider population at an early stage of project design, and therefore, with vague information about the project's impact on them. In addition, it is plausible that in order to meet the criteria of public participation, they interact with a section of the population. However, it is not possible to cover the whole region. Therefore, it is possible that areas of conflict are not covered, whether intentionally or unintentionally. Hence, in the advanced stage of the project, when affected communities finally get to know about the exact impact of the project on them, they neither have any formal opening through which to express their concerns, nor do they consider this as a desirable action. They have a strong sense of their unequal power when trying to speak out in opposition to those who govern them. Hence, even though communities are contacted with information about projects, it is not with the intention of allowing the community to constructively define the details of the project, nor with the goal of actively using their feedback in the feasibility study and in the decision-making process, as suggested by Flyvbjerg *et al.* (2003) and El-Gohary *et al.* (2006).

However, with regard to ways of facilitating this, it is not essential that there should be a community participation programme as such. As suggested by Flyvbjerg *et al.* (2003), 'there may be other ways of structuring reporting and the process of communicating with stakeholders, civil society and the general public' (p.135). Consequently, it is suggested that communication with the wider population through the LRD during the DPR preparation stage can be recognised as a way of facilitating stakeholder involvement; however, it should be restructured with the purpose of collecting background information from local communities and incorporating that feedback into the decision-making. Following the new Act, the suggested Social Impact Analysis must be run in consultation with the affected communities. This analysis can be considered a window to facilitate two-way information flow between stakeholders (in this case, affected communities) and project designers. Here, I argue that in the case of PPP projects, it must be ensured that actors from the private-sector concessionaire side

are directly involved while running such an analysis. Following Flyvbjerg *et al.*'s (2003) logic, affected communities must be consulted not for social welfare purposes, but for the benefits of the private-sector investors and project efficiency. Affected communities' rights and power to protest and obstruct the project at an advanced stage must not be undermined. While it is important to have the mechanism to operationalise a two-way flow of information, it is even more important for the rationale of the mechanism to be crystal clear to those who conduct the analysis.

### ***Step III. Lack of facilitation of the process in a timely manner***

The final step of this process is to make information available to the public in good time and collect feedback in advance so that it can be incorporated into the decision-making (Flyvbjerg *et al.*, 2003). Interviews and media reports from the case of Ramgarh bypass show that although the affected communities raised their concerns to the core developers, this took place too late in the process to be incorporated into the design decision (Group interview 03, August 2011, Jharkhand, India). As noted by interviewees from the general public, the only formal way for this affected community to protest against the project was to take out a lawsuit against the NHAI. When the villagers' committee made the argument for offsetting the road by 500 m in order to keep everyone happy, they were told that it was too late to incorporate this into the design, as it would interfere with the proper geometry of the road (Group interview 02, August 2011, Ramgarh, Jharkhand, India). As found in the minutes of a meeting that took place during the initial stages of the project, the chief secretary of the region requested that RCD officials should visit the site and explain that it was not possible to realign the road, as the connecting components of the road were already in place and it would have to pass through the village in order to maintain its geometry. As the minutes of the meeting mention, the chief secretary said they should be convinced that it might be 'a question of compensation, but not re-alignment' (Document 01: National Highways Authority of India, Ranchi, India, 2010). Here, the effect would have been in terms of the time and money that the private-sector actors had already invested. This analysis was also confirmed by the minutes of meetings with state government officials, available from the NHAI office (Document 01: National Highway Authority of India, Ranchi, India, 2010). This confirms Flyvbjerg *et al.*'s (2003) recommendation for the 'engagement of stakeholder groups and general public in planning and decision-making from an early stage' (p.109). As per the new Act, as the Social Impact Analysis has a

specified time period of validity, after which it must be redone, it is anticipated that the situation would be improved. However, it would be crucial to conduct such analysis at a stage when the private-sector concessionaire has finalised the design.

#### **8.3.1.2 To eliminate the influence of lobby groups**

The second purpose of operationalising transparency through stakeholder involvement in large-scale infrastructure projects is to eliminate the influence of lobbying groups over decision-making (Flyvbjerg *et al.*, 2003). As discussed in Chapter 3, according to Sen (2009), elimination of lobbyists would assure the inclusion of voices from different parts of society in the decision. Interviews with the wider population show that the selection of an alternative alignment for the road, passing through farmland, was taken behind closed doors by core developers without any consultation or mediation with the general population (Group interview 02, August 2011, Ramgarh, Jharkhand, India). In this case, as the alternative alignment would go through a dense urban area, following Sen (2009), the two sections of the population concerned would be communities from the urban area and communities associated with the agricultural land. Minutes of meetings supplied by the core developers on the meetings between the core public-sector actor and the peripheral actor (various state government departments) show that the decision was taken to avoid the demolition of a dense urban area along the road (Document 01: National Highways Authority of India, Ranchi, India, 2010). According to the documentation, this would have involved time delays, high costs due to the demolition of the existing structures, and legal and financial complexities for compensating displaced communities (Document 01: National Highways Authority of India, Ranchi, India, 2010). As one of the key informants noted:

This was not a question of compensation. First the road was planned through urban area, they protested. Then through Ramgarh. We heard of the bypass 4-5 yrs back, but wasn't sure where this will go through.

(Group interview 02, August 2011, Ramgarh, Jharkhand, India)

Although for the core developers who made the decisions, these were valid reasons for selecting the alignment through agricultural land (which was fertile land in this case), their decision was not acceptable to the wider population; in particular, to the affected communities who had to be relocated (Group interview 02, August 2011, Ramgarh, Jharkhand, India). Moreover, there was an interesting alternative statement made by the affected population associated with the agricultural land. As this decision was not

acceptable to them and there was no official information publicly available justifying such a decision, many informants from the agricultural community expressed their perception of corruption about project developers who might have accepted bribes from the urban area communities who were otherwise to be affected. Although they could not provide any firm evidence or any strong basis for such an explanation, their strong perception of corruption about the local actors in the region contributed to this belief (Group interview 02, August 2011, Ramgarh, Jharkhand, India). Moreover, as the informants said, the primary intention of the core developers was to construct the road, which was economically productive, in any case. Particularly in the case of PPP projects, both public- and private-sector partners are interested in a quick land acquisition process, as delays in this would oblige the public-sector partner to pay pre-construction risk capital in the form of compensation (Document 01: National Highways Authority of India, Ranchi, India, 2010) and delay the construction of roads, leading to financial losses for the private-sector concessionaire. Hence, in order to accelerate the process of construction, the core developers chose this alignment on the rational basis of enabling smooth progress. In other cases, key informants from core public-sector actors confirm that as land acquisition is one of the critical problems in India, project developers are slowly moving towards designing projects depending on land, which is currently or easily available (Interview 09, September 2010, Jharkhand, India).

Counter to this, not only the affected communities' interests but also those of the Agriculture Department would have been better served by keeping the fertile lands available for farming. However, on being asked about support from the Agriculture Department during the legal proceedings, one of the key informants from the committee noted: 'They were of no help!' (Group interview 03, August 2011, Ramgarh, Jharkhand, India). Hence, this case identifies two sets of lobby groups: communities in the urban area versus those associated with the agricultural land; and project developers versus the Agriculture Department.

As neither the wider population, including the affected communities, nor other government departments with an interest in conserving natural resources were consulted during the decision-making process, the decision was clearly dominated by the party most interested in road development: the road developers. Alternatively, it could also be said, that the decision was captured by the communities in the urban area in terms of not affecting their interest. Hence, following Flyvbjerg *et al.* (2003), the decision in this

case was definitely captured by groups lobbying for the development of the region, beginning with road development. However, as Sen (2009) would argue, such lobbying also resulted in undemocratic decision-making.

#### **8.3.1.3 To maintain law and order**

The third purpose of operationalising transparency through stakeholder involvement is to maintain law and order. Interviews with both the core developers and the wider population show that making information available through stakeholder involvement would have also helped the peripheral actors to instil law and order in the region. This is also confirmed in the literature, as Flyvbjerg *et al.* (2003) argue that lack of stakeholder involvement might provoke local communities to act destructively in what is perceived to be a helpless situation. This also confirms the outcome of such an undemocratic decision-making process, resulting in a high degree of dissatisfaction in the wider population and hence in violent outbursts against such development processes.

As already described, the local communities gained information about the impact of the project on their livelihoods during the final survey stage, when surveyors from the state government LRD visited the site to make final measurements (Interview 21, August 2011, Jharkhand, India). At this point, the communities understood the seriousness of the issue, as the measurements were being taken to design the layout and materialise the project. At this stage, they understood that the project would not only displace them, but would also severely affect their way of life, by taking over their farmland, the basis of their economic wellbeing. Figures 8.5 and 8.6 show the farming activities on the land to be acquired for bypass construction. As one of the key informants from the community observed: 'These are fertile agricultural lands and are farmable throughout the year' (Group interview 02, August 2011, Ramgarh, Jharkhand, India).





Figure 8.5: Agricultural land through which the Ramgarh bypass is proposed to pass

Source: Accompanied site visit 02, July 2011, Jharkhand, India



Figure 8.6: Farming activities at the proposed Ramgarh bypass site

Source: Accompanied site visit 02, July 2011, Jharkhand, India

Being without legal recourse, local communities will tend to protest against such projects in a violent manner. In this case, their first step was to react violently to the surveyors who delivered the information about the project and land acquisition (Interview 21, August 2011, Jharkhand, India). As one of the key informants from the community said: ‘We got hold of the instruments these surveyors were carrying. The

state government Land Revenue Department later came to collect these instruments. ...’ (Group interview 02, August 2011, Ramgarh, Jharkhand, India).

This information was also verified by the minutes of meetings provided by NHAI of their meetings with the state government, and by field notes. However, it was mentioned as a problem created by the affected communities and considered as a barrier to road construction (Document 01: National Highways Authority of India, Ranchi, India, 2010). These kinds of violent reaction against project developers are identified in the literature as arising in the absence of stakeholder involvement. As Flyvbjerg *et al.* (2003) would argue:

The lack of public involvement also tends to generate a situation where those groups who worry about the project and are left without information and influence are inclined to act destructively, for instance by trying to shoot down the project through adverse actions ...

... if groups who feel concerned were included in the project development process for a large scale project at an early stage, the result would be improved chances that those conditions that people view as important to making a decision would be taken into account.

(Flyvbjerg *et al.*, 2003: 88–89)

Here, the purpose of transparency is not just to disclose information about the project to affected people but also to help them understand the effect of the project on them and incorporate their feedback in the project design, keeping their concerns in mind. This supports the extended understanding of transparency beyond mere ‘disclosure of information’. Hence, in this case, had the affected communities been included during the decision-making, the importance of these farmlands for their livelihoods would have been addressed and incorporated into it, improving the quality of design. As explained by one of the key informants from the community, since such developments come at the cost of local people’s interests, they represent a threat that put this community under stress, and the lack of legal recourse gave them a sense of helplessness; and hence, they reacted violently (Group interview 02, August 2011, Ramgarh, Jharkhand, India). Therefore, this explanation identifies the lack of a window to express their concern as a barrier to fulfil the purpose of transparency. This also shows that in the presence of a public participation tool such as stakeholder involvement, and incorporating input from the community regarding farmlands (as fertile land and the basis of the local economy) in their decision regarding the road’s final alignment, the outcome could have been different, altogether avoiding any violent reaction from the community.

In addition, such a reaction from the affected population, in the absence of any legal procedures to deal with the situation, was perceived as reflecting a lack of law and order in the region from the private-sector developers' point of view (Interview 08, September 2010, Jharkhand, India). Acting on the preconceived idea of undertaking development in the region, they might legitimately demand security from the government, which would specifically be delivered through the Police Department of the state government. However, rather than dealing with the region's lack of law and order in a piecemeal fashion, it might be worth exploring why this region faced such a lack in the first place. Considering the socio-economic profile of the region, it might be argued that the government had attempted to develop the region without due consideration for the local population. This is also reflected in an interview in this case with a member of the general public, showing their perception that the government is developing projects of national importance at the cost of the local population (Group interview 03, August 2011, Ramgarh, Jharkhand, India). Such situations can only be improved through inclusive planning, with stakeholder involvement an important tool for achieving this at the project-level planning stage. Therefore, in this case, the purpose of maintaining law and order through operationalising transparency is not met. This discussion about the power of the different actors provides evidence to show why mere 'disclosure of information' cannot be considered 'transparency' and how power plays an important role as a barrier to fulfil the purposes of transparency. Finally, in relation to the new RTFCT Act, it is important to keep this point in mind. I argue that actors from the private-sector concessionaire side must be involved in Social Impact Analysis as, besides its social welfare purpose, private sector actors also lose their time and money in dealing with such protests by the affected communities.

#### **8.3.1.4 To reduce structured influence of power inequality**

The fourth purpose of operationalising transparency through stakeholder involvement is to reduce the structured influence of power inequalities. Finally, evidence from the Ramgarh bypass case shows that maintaining transparency through stakeholder involvement would have reduced such influence between the actors in the decision-making process. As outlined earlier, the 'Save the Land committee' had lost their case at the state level, when the chief justice of Jharkhand wrote that he could not go against the central government policy (Group interview 03, August 2011, Ramgarh, Jharkhand, India): an example of the influence of unequal power distribution. An attempt was made

to access court papers. However, it was difficult to get hold of the right person due to reliability issues. It can be stated that here the issue was about the power relationship between the state and central government. Understandably, as this region is in a state of political turmoil, and is considered ‘underdeveloped’, the state government depends on central government for resources, as already described in Chapter 6. Central government promises to bring further resources to the region if they create an ‘investment-friendly environment’, which means a positive environment for implementing their policies. This applied particularly to this case, which was about a national highway, a project of national interest, which is considered much more important than people from one or two communities.

When forming the committee, these communities took care to strengthen the committee with wider participation, as it would otherwise be difficult for them to voice their concerns. As one of the key informants from the communities noted:

We protested. We formed a committee and tried to strengthen the committee as police might come and pick up someone from home. That’s not what we want.

(Group interview 03, August 2011, Ramgarh, Jharkhand, India)

However, it was difficult to maintain the group over time, due to the spatial distribution pattern of the road project’s negative effects, which meant that some of the other nearby villages were happy with the road going through their area and the compensation offered. When they were informed that they could either collect the compensation or it would go into the treasury account, they withdrew from the demonstration. As the key informant from the committee related:

Road developers were so persuasive. We filed case. Chief justice of Jharkhand said, he won’t interfere in central government policy. If he doesn’t interfere in central government policy that is affecting local people, then who would? We had a governor 2-3 yrs back. He had an adviser called Mr. Dubey. He said, development work is welcome in Jharkhand but not at the cost of damage to villages. We also took reference of such policies. But nothing happened. They cheated us. Government cheated us. We have all documents. I didn’t disclose everything in the court. It was fertile land, which is being taken. Then they [state govt] broke the committee. They begged us to leave the land. They couldn’t fight NHAI. Some of the local people, whose land wasn’t that much affected, withdrew from the committee, accepted compensation. They were told that if you don’t accept compensation, road will be built anyway, but you won’t get any money. Only few were

left and hence the whole committee had to withdraw. The association wasn't strong ...

(Group interview 03, August 2011, Ramgarh, Jharkhand, India)

This extract shows a development process where national and state governments had an unequal power relationship and a policy that focused on just on national interests without any concern for local interests. Hence, power became a barrier in the process of stakeholder involvement, the fulfilment of purpose of transparency. Looking at the broader picture, the reason behind this unequal power relationship becomes clearer. The state of Jharkhand, being in political turmoil and at a transitional stage as a newly formed state, and underdeveloped, was strongly dependent on central government resources for its stabilisation, creating the resulting unequal power relationship. The central government exercised power over the state government for acquisition of land, while the state government was quite helpless due to their dependence on central government. The state government was persuasive and 'begging' local people to leave the land for the sake of the road. Ultimately, the local people had to leave their land, as the chief justice of Jharkhand failed to secure their interests. However, the local population felt 'cheated', as their own government had failed to take their side. As one of the key informants from the local community said:

NHAI didn't do it and stuck to this alignment. Agricultural Department was of no help. Deputy Commissioner of the area came to visit them, sat for long conversation and requested them to accept the compensation and give away their lands. As regional actors they cannot go against federal government policy. As you can understand, these farmers are poor people, it's difficult for them to run a legal case.

(Group interview 03, August 2011, Ramgarh, Jharkhand, India)

As reported by the key informants, they even took this case to court in Delhi. However, their views was disregarded, on the grounds of 'maintaining proper geometry of road' (Document 01: National Highways Authority of India, Ranchi, India, 2010). While this kind of development process is completely justified under the country's legal framework, a site visit and the image in Figure 8.7 of immense fertile agricultural lands (soon to be acquired for the road) raises questions about whether there was any alternative option for the placement of the road. As the community reported, they had requested that the developers should laterally shift the road by 500 m, so that it runs through what is largely infertile land. But the government and concessionaire refused any rethinking of the process on the grounds that it was too late to change the decision

about the road's route (Document 01: National Highways Authority of India, Ranchi, India, 2010). This overall discussion of stakeholder involvement shows that it is not enough to empirically measure 'transparency' by 'disclosure of information'. There are always particular purposes to operationalising transparency by 'disclosing information' and in this case it is to incorporate feedback into decisions through stakeholder involvement. Especially in the case of PPP, transparency does not mean mere 'disclosure of information'; it means two-way flow of information. As such, the purposes were not met as shown here; the instrumental role of transparency as explained by this study was not attained. With reference to the RTFCT Act, as a special section on prioritising food security has been added, the Agriculture Department is considered to be better empowered for the future under such circumstances.



Figure 8.7: View of the proposed Ramgarh bypass site

Source: Accompanied site visit 02, July 2011, Jharkhand, India

### **8.3.2 *Bigger purpose of transparency***

The following subsections assess whether the bigger purposes of transparency – rule of democracy (informed consent), equal treatment (social justice) and culture of openness – were met. Those subsections use particular cases to elaborate on these themes.

### 8.3.2.1 Rule of democracy: informed consent

Informed consent is identified as one of the important bigger purposes of transparency in disclosing information about government policy (Florini, 2007):

... the essence of representative democracy is informed consent, which requires that information about government practices and policies be disclosed. And in democracies, by definition, information about government belongs to the people, not the government.

(Florini, 2007: 3)

As mentioned, on the grounds of social justice – especially procedural justice – in a democracy, local communities must be informed and aware of such upcoming projects and the impacts on their livelihoods well in advance, to achieve a smooth rehabilitation process. Here, the mechanism to operationalise ‘transparency’ is through the disclosure of information about the impact of the upcoming project on the population well in advance. This is also expressed as ‘informed consent’ in the literature on large-scale infrastructure with regard to generating public support for projects (Flyvbjerg *et al.*, 2003).

Evidence from the Hazaribagh–Ranchi Expressway widening project shows that in a top-down planning approach, although the affected population are informed about the precise nature of the project on their way of life through surveyors and written notification, this arrives as an ‘order’ from a higher authority, and the issue of ‘informed consent’ is not respected.

As the case of Ramgarh bypass shows, the affected population were informed about the impact of the project on their property as an ‘order’ at an advanced stage of the project where no changes could be made, and hence the only area about which the affected population could raise any objection was the compensation offered. Moreover, other stretches of the same highway, including the Mandu area, show that irrespective of the affected population’s dissatisfaction with the compensation offered and pending legal cases, their lands were acquired and structures were demolished without addressing their concerns. Following Florini (2007), this kind of action clearly shows that the criterion of ‘informed consent’ is definitely not met here. Figure 8.8 below shows one of the stretches where structures are demolished to widen the road, while legal cases on compensation filed by the affected communities are still pending.





Figure 8.8: Land preparation for road widening along the Hazaribagh–Ranchi Expressway

Source: Field note 04, August 2011, Jharkhand, India

Evidence from Ranchi Ring Road also shows that the principle of ‘informed consent’ has not been met in the land development process. From the side of the public sector, as one of the key informants from the core public-sector partner observes, there is no requirement to gain people’s permission for road extensions, and hence, no information is necessary to be made available in the public forum. As he says,

We don’t advertise projects. Since this is on existing corridor, we don’t need to do. Bypasses are also considered part of existing corridor.

(Interview 11, August 2011, Jharkhand, India)

The cases of Lalgutua and Tupudana, affected by Ranchi Ring Road, show that affected communities were not informed about or even given an intimation of the impact of the project on their properties, even at an advanced stage of the project, while it was evident from the geometry of the portion of the road which had already been constructed that their properties would be taken from them. These people were threatened by the project, in that they would lose their properties, but they had no idea when and how. It is evident here that ‘informed consent’ was not respected in this case. However, as the affected communities were optimistic about the adjustment of the road alignment following a request to the engineer, the land development process in the case of state highway projects – as opposed to national highway projects – still seems to respect local people’s interests and maintain ‘informed consent’.



Therefore, in summary, in the case of national highways, while information about the impact of the project on one's property is communicated to the affected communities in the form of an 'order', there is very little intention to acquire 'informed consent'. There is a legal framework in place to allow land acquisition for highway development on the grounds of public purpose. The only ground for objection by the wider population is the amount of compensation. Although people still have the possibility to sue when they are not satisfied with the amount of compensation offered, their lands are taken away and houses are demolished for road construction even though their court cases are pending. This shows that national highway authorities are not bound to respect 'informed consent'. The situation is a little better in the case of state highway projects as engineers are considerate about realigning the road if possible to save people's houses. However, the preliminary process of informing them about the impact of the project is less structured and haphazard than for national highways. The new RTFCT Act demands consent from at least 70% of the affected communities before land acquisition. While this ensures that most people's informed consent will be obtained before land acquisition, the number 70% is still a concern.

#### **8.3.2.2 Equal treatment: social justice**

Another bigger purpose of transparency in the form of 'disclosure of information', on the grounds of social justice, is to ensure equal treatment for the population (Florini, 2007). As Heald and Hood (2006) note: 'Access to information about adverse government decisions may help citizens to protect their right to fair and equal treatment' (Heald and Hood, 2006: 122). Cernea (1988) also agrees with that.

With the example of the Mandu region from the Hazaribagh–Ranchi Expressway project, as previously discussed, it is evident that as the affected population are not aware of the basis of the compensation rate, they have the perception that compensation is allocated on an *ad hoc* basis without any satisfactory explanation. Hence, such cases imply that the principle of equal treatment under social justice is not met here. This even adds to people's perception of corruption, on the basis that rules for such discretionary judgements are absent from the public domain. Hence, following Heald and Hood's (2006) definition of transparency on the basis of 'fair and equal' treatment, the system is proved to be non-transparent on the basis of the unavailability of clearly established and published rules in the public domain, which should be intelligible to and accessible by the general public.

### **8.3.2.3 Culture of openness**

This subsection reflects upon whether a culture of openness, one of the bigger purposes of operationalising transparency, has been successfully created and experienced by the wider population in the cases discussed above. As elaborated in Chapter 3, a culture of openness can only be created through an improved presumption of trust in society when the wider population's concerns are reflected in planning. Moreover, it also leads to the conclusion that disclosing information without any suggested corrective tool for future courses of action raises a sense of grievance and a feeling of being cheated amongst the population (Heald and Hood, 2006), and hence, creates the perception of a culture of corruption (rather than secrecy).

In general, as discussed already in this chapter, considering various cases, during the land development process, even though information is disclosed about it, a culture of openness cannot be created until and unless actions are taken based on the information disclosed about the project by the developers taking into consideration local communities' concerns over the project in the decision-making process.

This section analyses the culture of openness in the case of Ramgarh bypass. Following Sen's (1999) definition on the purpose of transparency as an instrumental form of freedom, it can be argued that in the case of Ramgarh bypass, the planning system failed to create a culture of openness, which is one of the bigger purposes of transparency. While the local community could be said to form a forum for expressing their concerns through litigation against the road developers, due to the delay in the process of accessing the exact information about the project's impacts, their concerns were expressed at a later stage and hence ignored in the process. Here the 'culture of openness' was not created not just because they failed to incorporate affected communities' concerns in the design, but also because they failed to show a valid reason for not doing so. Even in the legal proceedings, it was said that it was too late to do so. Hence, had they known the concerns in time, it would have been possible to incorporate them in the design. Moreover, although it was not explicitly mentioned anywhere, one can potentially argue that they could have been incorporated even then, only with severe financial implications for the project developers. There were power inequalities between the actors in the system, with the result that the local community lost trust in the government. The statement of one of the key informants from the wider population that 'They cheated us. Government cheated us' (Group interview 03, August 2011,

Ramgarh, Jharkhand, India) shows people's perception that their trust was violated, due to a lack of openness within the system. As a result, their social presumption of trust was affected in terms of what response they expect to get when they express their concerns. This also made local communities feel that government has a greater priority to promote development in the region and that local people's concerns are of no value to them (Group interview 02, August 2011, Ramgarh, Jharkhand, India). Heald and Hood (2006) would confirm that this is why it is important to understand when to introduce transparency. If transparency is introduced in the middle of a process without being able to carry out its implications, then it could potentially break people's trust. This shows how local communities developed a sense of a culture of corruption (rather than secrecy) in the region, due to the irresolvable conflict between regional development and local communities' interests.

Following both Sen (1999) and Florini (2007), the population affected by Ramgarh bypass feels 'helpless' with regard to the law and 'powerless' with respect to the road developers for the protection of their economic basis in society. They have very little expectation from society that they will be looked after in terms of preserving their own interests. The wider population's resulting dissatisfaction with the compensation and with developers, who have ignored their interests with the help of the law, cannot support a culture of openness. Hence, as the evidence shows, the purpose of transparency was not achieved in this case.

Stepping back in time, it has been suggested that there was scope for the government to disseminate information about the project in advance, in which case, people with concerns could have participated in the decision-making process. Even though the final decision would still have been the same, it would have been important for the community to see that the government was trying their best to address their concerns, as suggested by Flyvbjerg *et al.* (2003). In addition to this, a further rationale behind a process facilitating such information disclosure is to hold the government accountable for their actions towards the wider population:

The implication of the recommendation to make use of a new approach to project development is first and foremost to make the role of government substantially more clear, and to make it more possible to hold government accountable for playing its role. Such accountability is an explicit constitutional requirement in most western democracies.

(Flyvbjerg *et al.*, 2003: 134)

Finally, although the FOI movement has contributed considerably towards the creation of a culture of openness, it is also identified in the literature that the mere implementation of the RTI Acts will not ensure the improvement of trust and the creation of a culture of openness. As Roberts (2000) observes:

FOI law will not produce a culture of openness. Nor is it clear that the FOI will improve trust in the government ... the connection between openness and trust is tenuous for two reasons. The first is that the determinants of trust are multifarious, and it is likely that other factors – such as the economic uncertainty and physical insecurity felt by citizens – play a large role in influencing levels of trust. The second reason for caution in positing a correlation between openness and trust lies in political dynamics, which will be set in play by the FOIA (Freedom of Information Act) itself.

(Roberts, 2000: 119)

#### **8.4 Barriers to transparency**

In the process of land acquisition, the strong bureaucratic nature of the NHAI and their ‘power’ – as even expressed in the National Highways Act, 1956 itself – allow them to ignore people’s preferences and to acquire land if required for the ‘public purpose’ of national highway construction. As already described in Chapter 7, NHAI was established with this extreme power to construct national highways, the main artery of the economy, to advance the economic development of the nation. This form of authoritarian power can potentially be looked upon as a strong barrier to the purposes of transparency, such as informed consent and a culture of openness. This power entitles NHAI to acquire land required for roads, literally without considering the affected population’s interests. This arrogance of NHAI allows them to inform the affected population about the impact of the project in the form of an ‘order’ from above. This form of power can be explained as authoritarian power, following Chen and Hubbard (2012).

As has been already discussed above, the cases discussed show that one purpose of transparency – informed consent – was hardly met. The main reasons leading to the non-achievement of this purpose were dissatisfaction with compensation, lack of any possibility to express concern, and acquisition of physical property and demolition of structures while cases were still pending. As an explanation, based on the evidence, it is shown that people’s dissatisfaction with compensation is generally based on lack of information on the compensation rate, as they are required to give up their land in any

case. This dissatisfaction with compensation can be improved to a certain extent by refining the structure of the notice, incorporating the base rate of compensation and the rationale for doing so in the notice. As the affected population do not have any formal window to express their concern except through taking their case to court, this spreads dissatisfaction amongst them. This lack of formal means to create a two-way information flow is a barrier of transparency. Finally, as discussed in relation to a culture of openness, the affected population lose their trust in the system as their lands are taken from them and structures are demolished while their cases are still pending. This happens due to the lengthy legal procedures in India. This procedure is one of the main barriers to meeting the purposes of transparency. Because of the structure of PPPs, as the public-sector authorities are bound to pay compensation to the private-sector actors for any delays in handing over the land, and private-sector actors also lose money on delayed project completion, they want to rush through the process of land acquisition and development. Hence, they take possession over land irrespective of any cases pending. These barriers to transparency are structurally integrated in the system.

## **8.5 Summary**

This chapter has investigated the mechanism of transparency, its stated and bigger purposes, and barriers to it, in Phase II: Project design and land development. To reiterate, although the literature on transparency in PPP does not discuss the land development phase, it was impossible to carry out such a research study in the context of India without imparting significant attention to this critical phase, especially as ‘transparency’ is investigated from a critical social science perspective. This phase is important in relation to transparency, as the wider population encounters the physical reality of the project during this phase and as it provides enough scope to incorporate public participation in the infrastructure planning process. Flyvbjerg *et al.* (2003) also recognise this. I consider this phase important as land acquisition is identified as a critical risk in infrastructure development. Although one may potentially argue that public participation is not mandatory in national highway planning, I strongly argue that stakeholder participation, considering affected communities as stakeholders, must be carried out at the land identification process in a democracy, as the project has a negative impact on the affected communities’ livelihood. With evidence I show how prior notification about land acquisition and compensation to be offered is a discussion relevant to transparency in a democracy, and how such transparency leads to procedural

justice. The visit of surveyors to measure the land during project design is one of the main informal ways for the affected population to learn about the project. Land acquisition is considered a public purpose and authorities have the power to acquire land on such grounds; their power is also integrated into the legal system itself. 'Informed consent' is one of the main purposes of transparency in a democracy with a top-down planning approach. As the analysis shows, the authorities have mostly failed to acquire such informed consent of the affected population, and in most cases they are not concerned about doing so. The process of land acquisition has also created people's lack of trust in the system and failed to create a 'culture of openness'. Also, as the analysis also demonstrates, the top-down planning approach and the highway authority's supreme power over others to construct highways are the two main barriers to achieving the purposes of transparency. Finally, although information about the impact of the project on one's property is disclosed, the land acquisition processes for national and state highways fail, overall, to meet the purposes of transparency in this case. Hence, the mechanism of transparency is highly questionable for the cases of the Hazaribagh–Ranchi Expressway widening project and Ranchi Ring Road in the phase of land development, in terms of what information is disclosed and when, raising questions about the procedural justice of the system. The RTFCT Act 2013 is anticipated to improve the state of affairs regarding land acquisition. However, while the situation concerning informed consent is expected to be improved, the Act will do little in relation to standardising the processes of compensation decisions and reimbursement. Although this new Act claims to pay compensation as per market rate, decisions over the definition of 'market rate' are another uncertain area. Moreover, as already discussed, as long as the rationale of such a mechanism remains as a social welfare purpose, affected communities would remain powerless. Private-sector concessionaires must understand its importance for their business purposes, and actors from their side must be involved in such interaction processes, acknowledging affected communities' influence in delivering a more effective project. However, strong state regulation is still important in the case of procuring land for public purposes, and the state must intervene to negotiate compensation, as the land is strictly state property.

## **Chapter 9. Transparency in Phase III: Project Construction and Maintenance**

### **9.1 Introduction**

This chapter investigates the mechanism of transparency, its stated and bigger purposes, and barriers to it in Phase III: Project construction and maintenance. The following framework is used to assess whether the criteria of transparency are met, mainly in the cases of Ranchi Ring Road and the Second Vivekananda Bridge. The Hazaribagh–Ranchi Expressway project, being in an early stage of construction during the fieldwork, could offer little data for this phase. Proponents of the PPP model recommend that transparency should be restricted in this phase, in contrast to the traditional model. The rationale behind the restriction is that the risk transfer and the performance contract, two components of the accountability framework, are expected to make PPP more accountable in comparison to the traditional model. As elaborated in Chapter 4, the uniqueness of this study is that it also investigates the breadth of transparency, including Phase III. This chapter presents empirical data to show that restricted transparency and the lack of strict implementation of other components of the framework ultimately pose questions about public-sector accountability.

The existing policy framework provides guidelines for transparency in this phase. Policymakers advocate that the ‘award, construction and maintenance of project must be done through a transparent and fair way’.<sup>57</sup> This phase must demand transparency to ensure that the public interest is protected during decision-making. Project specifications are outlined in the Detail Project Report (DPR) and the Model Concessionaire Agreement (MCA) and agreed upon during partnership formation. In this case, the public interest is considered to be protected if the product is delivered as per the previously determined project specification, assuring the quality of the project. To summarise the literature review, prior studies in construction management show that relational factors such as trust and power override accountability during project construction (Smyth and Edkin, 2007). From the context-specific literature and discussion, it is also evident that this phase is prone to corruption because of the capital-intensive nature of projects (Kenny, 2009). Hence, it becomes even more essential to investigate transparency in this phase to maintain public-sector accountability as regards

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<sup>57</sup> <http://www.firstpost.com/politics/let-their-be-transparency-in-ppp-projects-says-pm-81935.html>  
accessed 1 June 2013

the wider population in terms of assuring project quality. Otherwise, the public interest can be seriously threatened through the delivery of low-quality projects, leading to misuse of public money. The following is the framework for investigation.

Table 9.1: Mechanism of transparency in Phase III

	Are actors bound to the proposal after contract is awarded?	Are public interests protected in decision-making?	Are such decisions documented?	Are those documents accessible by the wider population?
Monitoring of construction process				
Monitoring/testing of end product				

#### **How are the stated purposes met?**

- Is previously decided performance contract strictly implemented (as discussed in Section 4.5.1)?
- Does the process successfully combat corruption?

#### **How are the bigger purposes met?**

- Does the process ensure the public sector's accountability to the wider population in terms of delivering the previously determined quality of the project?

#### **What are the barriers to transparency?**

### **9.2 Phase III: Project construction and maintenance**

The design of a project includes the geometry of the project and the specification of its structure. The specification of a project includes requirements about the materials and process of construction. It is mainly outlined in two documents, the DPR and the MCA, and is negotiated and determined amongst the partners during partnership formation. Transparency during Phase III must provide evidence showing that the project is strictly implemented following the previously determined specification. This also conforms to UNDP's guidelines on transparency in PPP, which say that the process is transparent



when the private-sector concessionaires are ‘bound to their proposal and not to be able to change it after the contract is awarded’.<sup>58</sup> This is reflected in the above table on criteria.

In theory, as opposed to the traditional model, PPPs do not require public-sector actors to maintain transparency, due to the fact that the risk transfer and the performance contract automatically hold private-sector concessionaires accountable (Flyvbjerg *et al.*, 2003). In the PPP model, the construction risk lies with the private-sector partner. This means, that if there are time delays and cost overruns of projects during construction, the private-sector partner pays that risk capital. In case of BOT projects (both toll and annuity), if the private-sector partner fails to complete the construction on time, their commercial operation date is delayed. Hence, in the case of toll projects, their toll collection is delayed; and in the case of annuity projects, they receive the annuity payment later than planned. It is therefore in the interest of the private-sector actors to complete the project on time. However, Flyvbjerg *et al.* (2003) demonstrate that private-sector actors may have a greater motivation to settle for an inferior quality of project; for example, if to do so would save them time and money. Proponents of PPP would argue that there are market mechanisms to safeguard quality (Flyvbjerg *et al.*, 2003). Following the performance contract, private-sector actors are expected to maintain the project for the concession period, and are paid for the performance of their product; ideally, they should control the project quality during construction for their own benefit. After all, private sector participation assures production efficiency (Auriol and Picard, 2009). However, strict implementation of such ideal and theoretical concepts is questionable in a setting known for corruption and unequal power relationships (as discussed in Chapter 6). As cost overrun and delay in construction are the main weaknesses of the traditional model, the timely completion of project within budget has been identified as the measure of success of PPP projects (Flyvbjerg *et al.*, 2003).

This chapter provides evidence to show why project quality should be one of the major criteria to measure project success, especially in relation to public-sector accountability. Addressing a wider debate, it also raises questions over whether PPP models are really more transparent and accountable in comparison to the traditional model (Siemiatycki, 2006; Grimsey and Hodge, 2004). In the case where VFM methodology is strictly followed in making the decision on PPP adoption, this would also elicit further queries about the validity of such methodology. As already has been mentioned, as transparency

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<sup>58</sup> [http://pppue.undp.2margraf.com/en/08\\_2.htm](http://pppue.undp.2margraf.com/en/08_2.htm) accessed 1 June 2013

and accountability are conflated terms, this study on transparency often refers back to the literature on accountability. UNDP provides guidelines on maintaining accountability through performance contract as follows conforming to the discussion above:

Accountability is responsibility for performance and results; it involves holding the partners (private or municipal) responsible for results against agreed upon performance standards.

(United Nations Development Programme, online)<sup>59</sup>

The following is a discussion on the mechanism of transparency, its stated and bigger purposes, and barriers to it. Like Chapter 7, this chapter carries out its analyses by project.

### **9.3 Mechanism of transparency**

#### **9.3.1 Hazaribagh–Ranchi Expressway**

The Hazaribagh–Ranchi Expressway project was in an early stage of construction when the fieldwork was conducted. Hence, it provides little data about this phase and actors' experience from prior projects. As already mentioned, the DPR and MCA are the two documents providing information on the pre-defined, -determined and -negotiated project specifications. As this project and Ranchi Ring Road show, private-sector actors have the freedom to alter the project specification, as may be required, during project redesign, after they have been awarded the project on a BOT on DBFOT (Design-Build-Finance-Operation-Transfer) basis. This is confirmed by the name of the form of PPP, i.e. DBFOT, as mentioned in concessionaire agreements; and also by public- and private-sector actors (Interview 01, August 2010, Jharkhand, India; Interview 08, September 2010, Jharkhand, India). At this stage, private-sector concessionaires work with a team of external specialised consultants. This system of allowing redesign of the project itself raises questions about the transparency guidelines as outlined by UNDP, which say that the private-sector actors must 'be bound to their proposal and not be able to change it after the contract is awarded'. This can potentially prompt a further query about protecting public interests in the decision. This is discussed in detail under the section on the stated purpose of transparency below.

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<sup>59</sup> [http://pppue.undp.2margraf.com/en/08\\_2.htm](http://pppue.undp.2margraf.com/en/08_2.htm) accessed 1 July 2014

For Phase III, the mechanism to operationalise transparency (as ‘disclosure of information’ about strict implementation) is the monitoring of projects to ensure projects are implemented as per the predetermined and pre-agreed specification. Independent engineers (IEs) are the key actors for monitoring projects, and are appointed by public-sector actors to control project quality (Interviews 02 and 03, September 2010, Jharkhand, India). These IEs are external consultants, specialised in the field and appointed by the public-sector partners to monitor the process. For example, in the case of the Hazaribagh–Ranchi Expressway widening project, the IEs were highway and bridge engineers (Interviews 02 and 03, September 2010, Jharkhand, India). The IEs’ role is verified by Paterson and Chaudhuri’s (2007) recommendation of third-party monitoring. Their role is also supported by Siemiatycki’s (2007) recommendation of a watchdog to ensure public interests are protected where disclosure of information is restricted on the grounds of confidentiality. IEs are generally selected through a transparent bidding process (Interview 01, August 2010, Jharkhand, India). This ensures that they are selected on the basis of their efficiency through a fair selection process, and hence, are responsible for impartial monitoring, being informed by their specialised skill. Although, theoretically, the public-sector partner appoints them, their appointment is approved and paid for by both the partners, who generally share their payment on a 50-50 basis. This detail is crucial in understanding their relationship. As mentioned by the IEs of the Hazaribagh–Ranchi Expressway widening project, they feel sandwiched between public- and private-sector partners (Interviews 02 and 03, September 2010, Jharkhand, India). This also means that although IEs operationalise the mechanism of transparency, they are quite powerless in the situation (Non-participant observation 01, July 2011, Ranchi, India and Interview 02 and 03, September 2010, Jharkhand, India). A report from the IEs against the private-sector actors is often discounted due to their relationship with the public-sector partners. In relation to this, it is also important to note that the private-sector actors are not accountable to the wider population. Their interest in the project is merely profit-oriented. Although they have the skill to deliver a better-quality product (Auriol and Picard, 2009), they have incentives to compromise on project quality in order to save money. It is the public-sector actors who have to maintain accountability, as private-sector partners are in some way paid back from public money. This makes the role of IEs even more important in monitoring the construction and in protecting public interests in the decisions made during project construction and maintenance. As IEs are

answerable to the public-sector partner, they should be very strict in ensuring delivery of a quality project, also to maintain public-sector accountability.

### **9.3.2 Ranchi Ring Road**

The standard format through which IEs report back to the public-sector partner is a monthly meeting between both public- and private-sector partners along with a written report including their observations and recommendations (Interviews 02 and 03, September 2010, Jharkhand, India). The Ranchi Ring Road project provides evidence on such meetings, including reports submitted by IEs to assist with future decision-making. The meeting is generally organised with all relevant higher-level public-sector officers, and it is not merely one-way reporting. As I understood from attending one of those meetings, it is a conversation and argument between IEs reporting, public-sector partners questioning, and private-sector partners clarifying their position (Non-participant observation 01, July 2011, Jharkhand, India). Although the reports prepared by IEs are an example of one-way reporting, the minutes of such meetings are not the same. They are recorded in a power-influenced way. Both of these documents are kept on record for future reference and public scrutiny. The minutes can be considered as documentation of decisions made during project construction and maintenance.

As previously discussed, IEs, the key actors to facilitate the mechanism of transparency, have restricted powers to monitor the process completely. This can potentially affect the quality of the end product itself. The following is an account of how the mechanism of transparency, in this case, is narrowed down. These points are based on data collected from the Ranchi Ring Road project. As state-level projects adopt models of PPP project operation from the central government, these results can be generalised for the PPP framework in India:

- a. Technically, IEs do not have the authority to monitor the construction process; they are limited to monitoring or testing the end product.
- b. Technically, even the testing of the end product is limited to a very small percentage of it, and the private-sector partners reserve the right to identify the sample for inspection (Non-participant observation 01, July 2011, Ranchi, India; Committee Compliance Meeting Reports, Ranchi Ring Road and Second Vivekananda Bridge). This is also supported by the document acquired from the meeting (Nicholas O'Dwyer & Company Limited (JV) SA Infrastructure

Consultant Private Limited, 2011, Ranchi, India). Hence, the monitoring process is very much controlled by private-sector actors.

- c. IEs only have the right to report back their observations to their public-sector partner in a strict chain of command; however, they do not have any power to force the private-sector partners to incorporate the recommended changes. Only the public-sector partners have the right to do so on the basis of the IEs' recommendation (Non-participant observation 01, July 2011, Ranchi, India).

These points narrow down the IEs' scope to monitor, which raises questions about the accountability of the public sector to the wider population in terms of the quality of the product. Moreover, as in the case of Ranchi Ring Road, in addition to IEs, private-sector actors appoint multiple project management teams, depending on the scale and status of the project, to monitor the project quality during construction, as the construction and maintenance risk theoretically lies with the private-sector concessionaire (Interview 07, September 2010, Jharkhand, India). Moreover, the quality of the current project builds up their reputation for future opportunities. The project management team of Ranchi Ring Road coordinated with the IEs regarding the progress of the project (Interview 07, September 2010, Jharkhand, India). However, as private-sector partners appoint them for their own purposes, such teams have not been considered by this study as part of the mechanism of transparency during Phase III.

### ***9.3.3 Second Vivekananda Bridge***

The Second Vivekananda Bridge project was in its maintenance phase during the period of fieldwork. Hence, it offers an interesting story on transparency during Phase III. This project used a new technology for the first time in India. It won an international award for excellence in construction and for the timely completion of the project within budget. Figure 9.1 shows an image of a media report on this award:



It is a multiple-span "extradosed" bridge with a central plane of stay cables. The superstructure is monolithically connected to cast-in-place pier shafts supported on 45-m (148-ft)-deep caissons or well foundations. The circular caisson caps are located at riverbed level to reduce scour.

Construction of the bridge superstructure was critical due to high current and flooding after the monsoon season. This project received the American Segmental Bridge Institute (ASBI) 2007 Bridge Award of Excellence and the CELSOC 2008 Engineering Excellence Merit Award.

**Developer:** Second Vivekananda Bridge Tollway Co.  
**Contractor:** Larsen and Toubro

**General Consultant:** Consulting Engineering Services and PB Asia  
**Bridge Design Consultant:** International Bridge Technologies, Inc.

Figure 9.1: Image of a media report showing that Second Vivekananda Bridge received an international award

Source: accessed online<sup>60</sup>

Hence, considering 'timely completion' and 'completion within budget' as criteria to measure success, this project must be considered successful. However, it also tells another story. It shows how such a successful project can severely affect public-sector accountability in the absence of strict monitoring of construction and maintenance. It also raises questions about whether PPP models offer more transparent and accountable planning processes in comparison to the traditional model in reality, and about the validity of VFM methodology. However, one may argue that this particular project did not strictly follow VFM methodology to adopt PPP. I would argue that the lesson from this particular case is still generalisable to any other PPP project. As this project used a new technology for the first time in India, public-sector actors did not have the expertise to approve or supervise the construction. As one of the key informants states:

This bridge has used a technology for the first time in India. This technology is less costly and easy to maintain. However, there are some in-born defects of the system. Independent consultant should get the report from the senior engineer who would be accountable. There are some fundamental problems. Nowadays there are Ready Mix Concrete (RMC) labs. Quality of concrete is not checked there at the plant by an inspector of concessionaire. Hence, what is produced is uncontrolled cement.

The technique that this bridge has used is new in the country. This is called extra dosed pre-stressed cable suspension bridge. Someone from the government should have checked the design. However, as this has never been used in India, government officials did not have the knowledge or expertise to do this.

(Interview 14, August 2011, Kolkata, India)

<sup>60</sup> <http://www.ibtengineers.com/PROJECTS/Vivekananda/Vivekananda1.html> accessed 1 June 2013

As private-sector actors are invited to form PPPs for their technical innovation, it is not unusual to find this problem in other projects delivered by PPP. However, this can threaten public-sector actors' capacity to monitor the project in order to maintain public-sector accountability. This would be referred as a 'hard to assess' factor by Kenny (2009). In this case, a German IE was hired to monitor the project. During the process of monitoring in the construction phase, he whistle-blew because of faulty construction. As media reports confirm:

The resident engineer found that 84 reinforcement bars were missing in the concrete slab while comparing with the drawings. The explanation from the on-site engineer-in-charge he was under pressure from his superiors to achieve progress. Dorbecker also observed in his report that the steel shutter for the upper pylon is not matching with the requirements of the design drawings in dimensions.

(*The Telegraph*, 21 May 2006, Kolkata, India)<sup>61</sup>

However, this criticism was not accepted in a professional manner by the core developers' side. The IE's contract with the company was terminated on the grounds of failing to meet his responsibilities, and he was deported back to Germany (Document 09: *The Telegraph*, May 2006, Kolkata, India). Core developers denied any misconduct over the construction process. Interestingly, actors monitoring the maintenance of the project reported defects in the structure of the bridge as a result of a faulty construction process. They also confirm that rectification of such defects would involve huge costs and that it would be impractical for the private-sector concessionaire, responsible for the maintenance phase, to invest that amount. As a key informant from Second Vivekananda Bridge mentions:

For the bridge, cables are pre-stressed one by one. These are very crucial job, but not done under senior level supervision. If this is not done properly, cables might be under-stressed or over-stressed. Both are equally dangerous. And until certain time period is passed by, no one would be able to detect that fault. Now even the contractor gets to detect the fault during construction, they will tend to compensate this in some way, as redoing would involve huge cost. Hence, they will avoid the process.

(Interview 14, August 2011, Kolkata, India)

This whole storyline not only shows IEs' restricted authority to monitor the process, affecting the project's public-sector accountability, but also contributes towards actors' perception of collusion amongst core developers of the project. However, my data does

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<sup>61</sup> [http://www.telegraphindia.com/1060522/asp/bengal/story\\_6254179.asp](http://www.telegraphindia.com/1060522/asp/bengal/story_6254179.asp) accessed 1 June 2013

not clearly indicate any type of collusion. The other IEs of the project spoke to the researcher very diplomatically and refused to comment on this.

In the long run, this elicits queries about the public sector's accountability in terms of project quality, the project's longevity and the dangers to users' safety. The IE's responsibilities include checking actual construction on-site using approved construction drawings (Interview 14, August 2011, Kolkata, India). This is on the assumption that the construction drawings show structurally sound elements, and that the actual construction is therefore itself structurally sound. As shown in the above quote, the explanation by the site engineer shows that he compromised on the structural quality of the bridge, diverging from the structural drawings, in order to save time and produce results sooner. It can be anticipated that in this case his superiors' motive was to save time and money. This contributed towards the timely completion of the project within budget, but compromising on quality. Flyvbjerg *et al.* (2003) would confirm this statement. It was not possible to triangulate this data using any other sources: the IE agency from India during project construction was contacted, but declined to comment on this. The chain of evidence from different phases of the project confirms the same story. Proponents of PPP would argue that it should undercut such collusion by virtue of its structure. Empirical evidence is shortly presented from the maintenance phase showing how such structural components are undermined in reality.

As already discussed, the area of monitoring should also include monitoring of the construction process. However, as per the existing system, the IEs are restricted in their monitoring of the actual process, as opposed to monitoring the end product. Nevertheless, in some cases, there is a need to monitor the process as this affects the structural strength of the end product. As the above quote also shows, although the maintenance risk lies with the private-sector concessionaire, and theoretically, it is expected that they will mobilise any risk capital required, private-sector actors can potentially manipulate the IE's reports to avoid huge investments.

This project also offers data showing how the restricted power of IEs seriously influences projects' public-sector accountability. This project brings up certain issues that are general to the system of monitoring through IEs in the Indian context. Like the two other projects, actors from the Second Vivekananda Bridge project confirm that, depending on the level of detail in the DPR, the private-sector concessionaire can alter



the project specification. For example, as a key informant from Second Vivekananda Bridge states:

The second difficulty in the agreement is regarding the change of scope. For instance, the consultant appointed by government does some calculation in detail project report and recommends 160 mm thick Dense Bitumen Macadam layer. Then the concessionaire comes and says there is no need for 160mm thick layer, 130mm would do. The concessionaire saves a lot of money by doing so.

(Interview 14, August 2011, Kolkata, India)

This shows that the private-sector concessionaire has an incentive to change the specification in order to save money, and hence, it is important for the project to be scrutinised so that it does not affect the quality of the end product. Otherwise, this would impact the public sector's accountability in the long run.

The private-sector concessionaires prepare the detailed design and construction drawings to be used on-site. IEs are responsible for checking those drawings and approving them before releasing them to the site. Although IEs are given important responsibilities to monitor the process of implementation, the evidence shows that they are given few resources to materialise those responsibilities (Interview 14, August 2011, Kolkata, India). As a core informant from Second Vivekananda Bridge explains, the IEs' responsibilities include approval of construction drawings. Even though they have to give their approval, their engagement with projects is so restricted in terms of time, money and manpower that it is not feasible for them to monitor the process in detail. As one of the key informants remarked:

Again, there is very little manpower on the part of independent consultant with respect to the workload. Thousands of drawings are coming every day, they have to sign and stamp these. Although the stamping means it has been verified, it practically cannot be scrutinized in detail. He also has to check all concrete member drawings. The contractors save crores of rupees by compromising on quality of construction. IC [independent consultant] inspection in the PPP model is a farce ...

(Interview 14, August 2011, Kolkata, India)

This issue of restricted resources can be explained in terms of an agency problem in relation to transparency. Although the idea of an agency problem is an economic model to explain transparency (or the lack of it), it explains how giving greater scope to IEs to monitor the process of construction would have influenced the quality of the end

product, as the private-sector partners, the ‘agents’, do have incentives to avoid being monitored. As Prat (2005) explains:

The conceptual tool that economists use is the principal-agent model, a game-theoretic setting where a principal (for example, the citizen, shareholder) wants an agent (for example, the government, the CEO) to perform a certain task. In this setting, transparency corresponds to the ability of the principal to observe what the agent does. We can then ask what happens when transparency improves.

(Prat, 2005: 91)

Here, the private-sector concessionaire is the ‘agent’ who carries out the construction job, and the IEs/consultants are the ‘principals’ who monitor the process on behalf of the public-sector partner. The main principal, the public-sector partner, wants them to observe the agent, the private-sector concessionaire. In this case, although the IEs’ scope of monitoring includes checking drawings, due to limited resources, their monitoring might not be that effective. Such observations can be made in two ways: by testing the final product and by monitoring the process. I argue that in the case of road construction it is also important to monitor the process (Interview 14, August 2011, Kolkata, India). Hence, improved transparency (in terms of also achieving process transparency as opposed to event transparency only) would ensure an improvement in the quality of the end product. However, this data shows how the current limited scope of monitoring already restricts the fulfilment of the stated purpose of transparency, i.e. the strict implementation of the project specification.

As mentioned above, the power of IEs to monitor the construction process is restricted within the formal process of monitoring itself. The limited power of IEs constrains them from complete monitoring of the implementation as per the previously determined project specification. They are allowed to monitor certain aspects of projects only to cross-check whether the end products are delivered to the specification. This automatically indicates that the stated purpose of transparency is only partly met.

Although IEs are used as a mechanism of transparency, and the bigger purpose of transparency is to maintain public-sector accountability, IEs’ power to report directly to the wider population is not considered legitimate (Document 09: *The Telegraph*, May 2006, Kolkata, India). In fact, it is considered malpractice and is culturally unacceptable.

Private-sector actors are encouraged to use innovative technology. However, this also means that the public-sector actors lack knowledge about such technology and hence have limited capacity to monitor its employment. While IEs with suitable backgrounds are employed to oversee the process, the public-sector partner has to rely on them totally to undertake the monitoring. As evidence shows, the IEs' restricted power (which comes in various forms as discussed above) causes the monitoring process to be flawed from within (Interview 14, August 2011, Kolkata, India).

#### **9.4 Stated purposes of transparency**

The stated purpose of transparency in Phase III is to ensure public interests are met in the decision-making during this phase, and hence, to combat corruption. Ideally, public interests should be met in this phase through strict implementation of the previously determined project specification. First, here is a brief account of the outcome by various themes.

As per the Ranchi Ring Road project, changes in project specification could be made, even without approval from the public-sector partner, until and unless they have significant financial impact. As one key informant from the Second Vivekananda Bridge project said, IEs' restricted power to monitor the process of construction allows private-sector actors to use low-quality material, which affects the quality of the project (Interview 14, August 2011, Kolkata, India). Hence, the stated purpose: 'be bound to their proposal and not be able to change it after the contract is awarded' is violated in such cases.

As evident from my observation (as a non-participant) of a compliance meeting of Ranchi Ring Road, the minutes of meetings are documented in a biased way. This can potentially raise questions about collusion amongst actors. The storyline of the Second Vivekananda Bridge project during the project construction phase definitely elicits doubts about the veracity of the documentation, which is even confirmed by the evidence from the maintenance phase.

The stated purpose of transparency, via its mechanism through monitoring, is to ensure strict implementation of the previously determined project specification. Regarding such strict implementation, this section is concerned about the use of materials and the construction process rather than the geometry of the project. The main purpose of this section is to explore what the acceptable degree of non-conformity of the construction

to the project specification is, what can be monitored by IEs (as the legitimate authority) and, more specifically, what cannot be monitored by them and what implications this has for the project's public-sector accountability. Being influenced by empirical data, this section restricts itself to understanding issues related to the process of construction rather than the procurement of materials, and to qualitative data representing the dynamic of the monitoring process, especially its restrictions. Transparency through monitoring would also include auditing of procurement of materials. However, detailed discussion of such auditing was beyond the scope of this research.

#### ***9.4.1 Areas of monitoring***

As already mentioned, strict implementation of the previously determined project specification depends on the monitoring of material procurement and project construction. The three main issues with construction include monitoring of the quality of materials used, monitoring of the construction process and testing of the final product. Specifically, monitoring that the materials used are of the correct quality as laid down in the project specification is of the utmost importance while private-sector actors potentially have the incentive to use low-quality materials to cut their costs. This will, in the long run, influence the quality of the end product and its longevity. It is also important to monitor the construction process as per the project specification, especially in the highway sector, as it is also a deciding factor for the strength and the lifespan of the project. Finally, a sample from the final product is tested to ensure the quality delivered.

As Kenny (2009) shows, the process of multiple subcontracting makes it difficult to ensure the fairness of subcontracting and causes information asymmetry between client and provider, leading to lack of transparency. As already discussed in Chapter 7, restricted access to information on partnership formation, both at public-private and private-private level, confirms this reduced transparency. The construction industry is prone to corruption due to the involvement of multiple actors, complex and non-standard processes of construction that are hard to assess. Output-based approaches are recommended to reduce levels of corruption (Kenny, 2009). It can be argued that in the case of PPP, adoption of a performance contract, as discussed in Chapter 3, is expected to reduce the degree of such corruption. However, given the history of Jharkhand region, as discussed in Chapter 6, the transparency of such subcontracting is still a matter of concern. It was not possible to collect data on this due to the sensitivity of the

topic and the confidentiality demanded by private-sector actors. Moreover, as already mentioned, monitoring of the procurement of good quality material is a matter of auditing, and is beyond the scope of this study.

#### ***9.4.2 Restrictions on monitoring***

As the key informants observe, in the case of highway construction, the construction process contributes towards the quality of the product and its longevity (Interview 14, August 2011, Kolkata, India). The term ‘construction process’ mainly indicates construction techniques, which are specified in the concessionaire agreement (Document 06: National Highways Authority of India, 2010, Kolkata, India). As identified by the World Bank (2008), while it is relatively easy to monitor the use of construction materials through invoices, to monitor construction techniques requires someone to be physically present as an observer during the construction process. This brings up the issue of additional resources required to operationalise process transparency as opposed to event transparency.

However, empirical evidence shows that construction deficiencies affect the product in the long run but cannot be immediately identified via the monitoring of the final product just after construction. Hence, the process must be monitored continuously in order to assure the process specification is also followed, to ensure quality. However, in the Indian system, the existing framework of highway construction monitoring does not allow IEs to monitor the process; their role is limited to the monitoring of the end product. Hence, the mechanism of operationalising transparency does not allow scope for process transparency. As informants mention in their interviews, monitoring is also restricted to only a certain percentage of the end product, using particular methods, with the private-sector concessionaire’s approval (Interview 14, August 2011, Kolkata, India). This is verified in the IEs’ report for the Ranchi Ring Road project, where their scope of monitoring is restricted to a small percentage of the project which is, furthermore, to be selected by the private-sector concessionaire (Document 07: Nicholas O’Dwyer & Company Limited (JV) SA Infrastructure Consultant Private Limited, 2011, Ranchi, India). This pattern of monitoring confirms that such processes do not encourage process transparency as defined by Heald and Hood (2006).

### 9.4.3 *Combating corruption*

In the construction industry, which is known for its corruption, one main purpose of transparency in project construction and maintenance phase is to combat this. This issue has already been sporadically addressed in previous sections. Paterson and Chaudhuri (2007) recommend the use of third-party monitoring to reduce corruption in the construction industry. Combating corruption is also supported by UNDP's definition of it, and highlights the role of transparency in combating corruption:

Transparency is also about preventing corruption by being open about government decision-making. Corruption means, for example, contracts being given to private firms who may not be suited for the job at the expense of other bidders and at the expense of the public, especially the poor. There are many incentives for private sector firms to engage in corruption. They may want to ensure that they are included in the list of bidders, whatever their merits. Alternatively, private firms could attempt to influence the terms for bidders, or they might simply attempt to be selected regardless of whether or not they are the most suitable bidder.

(United Nations Development Programme, online)<sup>62</sup>

It is worth mentioning here that although the region of Jharkhand is known for corrupt practices, this section does not intend to present any evidence related to corruption, which was difficult to access in the hostile environment of the fieldwork as described in Chapter 6. Rather, it aims to present evidence mainly in the form of interviews, observations and peripheral document analysis, showing the loopholes in the system to operationalise transparency that may lead to conditions conducive to corruption. This chapter has mainly presented primary data to show how the IEs' restricted capacity to observe the process of construction might lead to the delivery of a poor quality product.

The case of the Second Vivekananda Bridge presented a situation where collusion was integrated at a higher level of authority. National highway authorities rely more on their private-sector partners and, hence, may ignore recommendations by IEs who may be foreign and only associated with the actors for the duration of this project. These forms of collusion are very intellectually integrated within the system by the elite class of core developers interested in building projects, and are hardly recognised in the literature.

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<sup>62</sup> [http://pppue.undp.2margraf.com/en/08\\_2.htm](http://pppue.undp.2margraf.com/en/08_2.htm) accessed 1 June 2013

## **9.5 Bigger purposes of transparency**

The bigger purpose of transparency in this case is identified as maintaining public-sector accountability, and ensuring the quality of the product delivered. As these infrastructures involve public money, the public has the right to be assured of project quality. According to Auriol and Picard (2009), private-sector participation must assure production efficiency in PPP projects. In particular, a commercially feasible project like the Second Vivekananda Bridge which is delivered through the BOT (toll) model must conform to production efficiency. However, evidence shows that this may not be the case, as private-sector actors still have the chance to be opportunists, especially as public infrastructure projects are capital-intensive and the private sector's returns are paid from public money in the long run.

In the case of the Second Vivekananda Bridge, as the empirical evidence shows, the bridge may potentially collapse in a couple of years, long before its designed lifespan is over (Interview 14, August 2011, Jharkhand, India). I recognise that there is a lack of strong evidence to back up such a strong accusation; however, this statement is partly verified by the chain of evidence from the construction and maintenance phases. Potentially, this not only threatens the lives of the users of the prestigious bridge project, but also indicates a huge waste of public money, as a completely new piece of infrastructure would demand new investment long before the anticipated time. This definitely raises questions about the public-sector accountability of such projects. Moreover, due to the lack of strict monitoring in the maintenance phase, it fails to meet the criteria of private-sector participation in public infrastructure delivery as outlined by Auriol and Picard (2009). Following Florini (2007) and Stiglitz (2003), the empirical evidence shows that public-sector accountability, one of the important roles of transparency, is not fulfilled in this case; also, people are being misinformed about how public money is being used to deliver public-sector infrastructure. As this project is part of the prestigious Golden Quadrilateral (GQ) project and has won an international award for excellence in construction, this elicits even stronger queries about the system that is supposed to ensure that public-sector accountability is in place. This thesis argues that merely controlling projects' cost overruns and delivery times cannot be considered the sole criteria of project success. Without strict quality control, such public infrastructure projects can potentially have a huge impact on public money in the long run.

## **9.6 Barriers to transparency**

Appointment of an IE, a third party, to monitor construction and maintenance is the mechanism of achieving transparency during these project stages. However, there are many barriers integrated into the IE's scope. On the basis of the empirical evidence discussed above, this subsection identifies four major variables that can be considered barriers to transparency. They undermine the IE's power to monitor the project's construction and maintenance for quality control. These are event-versus-process monitoring, referred to as event-versus-process transparency (Heald and Hood, 2006), limited skill of public-sector actors, unequal power relations amongst actors, and the dominance of trust as a soft relation over hard-core transparency for accountability, confirming Edkin and Smyth's (2006) findings.

### ***9.6.1 Event-versus-process monitoring***

Event-versus-process monitoring is the first barrier to operationalise process transparency that eventually affects the long-term purpose of transparency, which is to maintain public-sector accountability towards the wider population concerning the quality of the project, and hence, the expected benefits to be reaped from it. This section compares this barrier with Heald and Hood's (2006) category of event-versus-process transparency. As discussed above for the case of the Second Vivekananda Bridge, IEs' limited power to monitor the construction process encourages the private-sector concessionaire to behave in an opportunistic way, which leads to compromises in project quality (Kenny, 2009; Paterson and Chaudhuri, 2007). Restrictions to monitoring of the construction process can also be elaborated in terms of the agency problem (Florini, 2007).

### ***9.6.2 Limited monitoring skills in public sector***

As in the case of the Second Vivekananda Bridge, limited skills or expertise in the public sector to monitor innovative technology within a project is one of the main barriers to the process of monitoring, and hence, to transparency. On one hand, PPPs advocate private-sector actors' technological innovation; on the other, this automatically leads to lack of expertise in the public sector to monitor or approve the construction.



### **9.6.3 *Unequal power relations***

The third theme identified from the empirical evidences as a barrier to transparency is unequal power relations. While Miraftab (2004) raises the issue of power inequality in the global South and expresses concern about the need to research along those lines, there are very few studies that have actually elaborated the underlying pattern of unequal power relationships. This chapter identifies four forms of power that become barriers to public-sector accountability of the project. In presenting the evidence, this subsection identifies the dominant and hidden forms of power inequality in the process, drawing on examples from studies on power in planning (Chen and Hubbard, 2012). The following are four ways of exercising power that undermine IEs' capacity to monitor construction and maintenance effectively in order to ensure project quality.

#### **9.6.3.1 Independent engineers' responsibility without power**

One form of (lack of) power arises where IEs are given the responsibility to monitor the construction but no power to enforce changes in practice. This data is supported both by interviews with public- and private-sector partners and IEs, and observation of meetings amongst partners with IEs (Non-participant observation 01, July 2011, Ranchi, India; Interviews 02 and 03, September 2010, Jharkhand, India; Interview 14, August 2011, Jharkhand, India). Here, although monitoring – the mechanism to operationalise transparency – is in place through the use of IEs, their role is restricted to reporting back their observations to the public-sector partners. Hence, such monitoring does not allow them to ensure that the stated purpose of transparency is met, which is the strict implementation of the previously determined specification. They are appointed by the public-sector partners and only have the power to report any diversion from the specifications to them. It is then up to the latter to oblige their private-sector partners to incorporate changes. This is why IEs consider themselves to be 'sandwiched' between public- and private-sector partners (Interviews 02 and 03, September 2010, Jharkhand, India). Hence, the mechanism of transparency – monitoring – is operationalised through IEs who are powerless to satisfy the stated purpose of transparency. Hence, transparency as a means of development is not considered to be fully operationalised.

### 9.6.3.2 Exercise of financial power

Another dominant form of power that undermines IEs' capability to enforce changes is the private sector's financial power. The fact that private-sector partners are investors in the project further reduces IEs' power. Their complaints against private-sector partners may be ignored by the public-sector partners, and so IEs come to feel quite powerless in the situation. Hence, such financial power undermines IEs' ability to completely operationalise transparency. As one of the key informants observes:

Concessionaires attempt to reduce the overall volume of the work after they are awarded the contract. They can do whatever they want as they are investing so much of money. '*Matha kine nieche*' [they have bought our head as they are investing].

(Interview 14, August 2011, Kolkata, India)

The above quote definitely shows a very dominant form of power exercised by private-sector concessionaires. It is in their power to bring financial resources to the table. Miraftab (2004) mentions this form of power when she raises the issue of the private sector's profit-oriented interest in a partnership and the lack of research on power sharing in partnership implementation. Such forms of power have also been recognised in Linder's (1999) classification. Although the quote above shows how such power is exercised, I argue that such a form of power is exercised in a very subtle and indirect way, which is also confirmed by empirical evidence (Interview 14, August 2011, Kolkata, India). Since the public-sector actors hold the authoritative power, it is not directly exercised over them; however, it is exercised over the IEs, who are essentially powerless in the situation, interacting with private-sector concessionaires as mere agents of the public-sector partner. Such an indirect way of exercising power over IEs, rather than directly upon the public-sector partners, is also evident from interviews with other private-sector concessionaires who repeatedly mention that they are bound to request permission from the public-sector partner for anything that has financial implications (Interview 08, September 2010, Jharkhand, India). Data from observations of meetings also show that public-sector partners have greater authoritative power in the partnership and, hence, private-sector actors are not able to exercise their financial power directly on them (Non-participant observation 01, July 2011, Jharkhand, India; Interview 08, September 2010, Jharkhand, India). However, they exercise both their technical and financial power in a subtle/indirect way on their partners to manipulate the situation. This issue of IEs' responsibility without power has not been discussed yet in the PPP literature.

### 9.6.3.3 Exercising power for knowledge documentation for rational decision-making

Additionally, as the non-participant observation has indicated, the mere reporting of an incident (as observed) might not reflect the truth (Non-participant observation 01, July 2011, Ranchi, India). The contextual situations which resulted from the incident were no longer visible during the observations. Such contexts were explained to the IE and promises made with regard to the future course of action. The presentation of any information through documentation, which excludes the relevant follow-up discussion, does not present the real picture. The note-taker was given explicit instructions on how to write the minutes of the meeting, both by the private-sector concessionaire director and the public-sector partners (mainly influenced by the concessionaire director). The IE was also instructed on how to write up his report and what was and what was not in their remit to cover. Although I was only given access to this one meeting and was provided with minutes for the others, this provided me with an insight of how to read the minutes of meetings. As the extract from the notes during the observation shows:

As IE wrote that it wasn't done, SM [a person] claimed it was partially done. So, IE must keep tag of observation, what is rectified or what is partially rectified. There was objection of the term earth dumping. SM says, IL&FS discusses such issues with IC on site. Such discussions have to be reflected in the report. This report will go to Sir [the minister], and if it doesn't reflect all discussion it presents incomplete picture. Moreover, no RFI [request for investigation] has put through yet regarding this area. The main concern of the discussion was that at times specifications are not strictly followed due to site condition. Such site constraints are reflected through discussion. However, they are not reflected in IC's report. Such discussions are not reflected in any other type of document. Hence, there is a gap between reality and what is being documented which can definitely be considered as concessionaire's fault. There is a communication gap. The observations written in IE's report are correct. But the placement of observation in the report is not completely true. This is like '*Ashwathama hata iti gajo.*' [This is from a popular folktale saying truth can be presented in a manipulated way: Ashwathama is dead (and then murmuring 'it's the name of an elephant' out of earshot so that people think it is a man who is dead.)]

(Non-participant observation 01, July 2011, Ranchi, India)

Flyvbjerg (2002) mentions this kind of hidden form of authoritative power when presenting information for the particular purpose of decision-making. As opposed to the Baconian dictum that 'knowledge is power', he explains:

I had seen knowledge being marginalised by power and power producing the knowledge that served its purpose best. I concluded that knowledge

about phenomena that decide whether economic, social, geographic or other knowledge gets to count is as important as that knowledge itself.

(Flyvbjerg, 2002: 354)

As described in the above quote from an observation, if reports prepared by IEs are considered to deliver knowledge required for decision-making, then that knowledge is already generated in a power-influenced way. Before it is included in the report, it is already decided what 'counts' as knowledge. According to Albrechts' (2003) classification scheme on systems of power, such hidden forms of power might be categorised under 'manipulation' (to control or play upon by artful means) or even as 'authority' (power to influence or command thought, opinion or behaviour). In this case, powerful actors, who in this case are private-sector concessionaires, are manipulating the knowledge.

These extracts clearly show that there is always a purpose in presenting information and actors are quite conscious about this while doing so. Hence, information is not value-neutral and does not stand alone. It should be read with a specific interpretation, with a purpose in mind and knowing who has presented it to achieve what. Hence, the mechanism of operationalising transparency is itself value-influenced. Amongst public- and private-sector partners and IEs, public-sector partners are powerful in terms of authority, private-sector partners are powerful as investors and as technical specialists, and they also develop soft relationships amongst themselves to support the smooth operation of the partnership. IEs are given power to monitor but they are actually powerless in reality to enforce any changes they identify as necessary. This undoubtedly affects the public sector's accountability towards the wider population with regard to the quality control of a project, as, while the IEs are the main actors responsible for quality control, they are in reality powerless.

#### **9.6.3.4 Exercising power through legitimacy**

The fourth form of exercising power in practical situations is known as legitimacy. The case of the Second Vivekananda Bridge shows that mere disclosure of information, which is the general mechanism of transparency, cannot induce actors to take actions based on it until and unless the information comes from a legitimate source and is considered valid by those actors responsible for taking action. Such forms of power are also culturally understood and context-specific.

#### ***9.6.4 Dominance of trust as a soft relation over hard-core transparency***

The final barrier to transparency as identified from empirical evidences is the dominance of trust over transparency as a form of hard-core accountability. This dominance of trust, as a soft relation between the public- and private-sector partners, undermines the IEs' power to monitor highway construction and to force private-sector concessionaires to incorporate changes to ensure project quality. This subsection provides evidence to show that although the IEs' report back problematic issues to public-sector partners, private-sector partners are not thereafter obliged to incorporate changes, because their public-sector partners 'trust' them to incorporate the corrections in their own time, without requiring them to supply any proof to maintain hard-core accountability. Although this 'trust' is taken at face value, it can alternatively be interpreted as collusion amongst actors, challenging one of the stated purposes of transparency: combating corruption. However, no strong evidence was available in this case to confidently consider this as 'collusion'. As discussed in Chapter 3, the dominance of this form of 'trust' over hard-core accountability is recognised at the managerial level/project procurement level (Edkin and Smyth, 2006). This subsection presents evidence from Ranchi Ring Road, the Hazaribagh–Ranchi Expressway and the Second Vivekananda Bridge, explaining how this form of 'trust' is developed and how it undermines the IEs' capacity to maintain accountability.

Based on the literature, trust has been defined as follows:

Trust denoted the willingness of creditors to risk their capital on potential borrowers who might not be well known to them and who might or might not become repeat customers. Trust was a desirable virtue not only because it cemented the bonds between citizens but also because its existence resulted in higher level of commerce.

(Olegario, 2006: 6)

In line with this, trust can be defined as a form of 'risk' taken in the hope that a benefit will arise. This subsection first describes how such forms of 'trust' are developed and between which actors in practice. According to Kadefors' (2004) theory, there are three forms of trust: calculus-based, relational and institutional. Interviews with core actors in a project will show that such forms of trust are interdependent and one form cannot be developed in the absence of the others. However, as the interviews also show, the most important of these three forms of 'trust' is the calculus-based kind. In this context, this is developed through an actor's positive attitude towards highway development

(Interview 04, August 2011, Ranchi, India). Where the participating actors such a positive attitude, it is more likely that they will be supportive to the development. As one of the key informants from the Ranchi Ring Road case stated:

Main thing is approach of the government official towards the development authority. We are fortunate that senior officers from the state government have been very positive towards the development of highway. We receive full cooperation from the government departments. That is what a private partner need from his partners.

(Interview 04, August 2011, Ranchi, India)

Prior studies show that trust undermines hard-core accountability at the project-managerial level (Edkin and Smyth, 2006). Sundaram (2009) has confirmed this in the transport sector in the context of India. As interviews with core actors show, such positive attitudes and levels of trust are not developed overnight. It takes a long time to develop trust between partners, and it is not developed in a void, just by signing contracts or making promises. Relationships are developed through the actions of individuals, their dedication to their jobs, carrying out physical activities together and showing concern for others (Interview 08, September 2010, Jharkhand, India). High levels of trust need to be developed between actors, as the public-sector partner will legally hand over their assets and rights to their private-sector partner for the whole duration of the concession period. As a key informant describes it:

It gets improved day by day. 2.5 yrs back, when we landed at Jharkhand, there was only project director from the government side. And slowly, government has to hand over the asset to the private partner. Hence, the government must have the confidence in the private partner. In order to develop that confidence in the government, the private sector has to show that sincerity and dedication to their work. So, during the preparation of the detail project report, bidding and also during the start of execution, the private partner has to show the utmost dedication and sincerity to the project. That whatever interest you are having in the concessionaire is being fulfilled. It is up to the satisfaction level of the government of Jharkhand. Ultimately, it is the client or the employer is the government of Jharkhand. We are partners also and we have a relationship of client and concessionaire also. So, ultimately the government of Jharkhand has to develop their confidence. It has to perform. If the concessionaire is performing well and the quality of work being delivered is good, then the confidence will be developed itself. And I am very happy to say that between the government of Jharkhand and IL&FS, there is a very good level of understanding.

(Interview 08, September 2010, Jharkhand, India)

Although it might be argued that this data is collected only from interviews, since both the public- and private-sector actors express the same views on trust, and as this is also supported by observations during meetings between them (Interview 07, July 2011, Jharkhand, India), the data is considered valid. As this extract clarifies, at the managerial level it is important for the public-sector partner to have confidence in the private-sector partner. The private-sector partner has to work on developing this confidence. What matters in the end is a 'good level of understanding'. This confirms Kadefors' (2004) theory of calculus-based and relational trust. Calculus-based trust is described as where 'the trustee intends to perform an action that is beneficial to the trustor' (p. 176). As the above extract mentions, when 'whatever interest you are having in the concessionaire is being fulfilled' (Interview 08, September 2010, Jharkhand, India), this develops the public-sector partner's trust in the concessionaire. The concessionaire fulfils the expectations held of them through dedication and sincerity. Hence, even though the actions have not yet been performed, their dedication and sincerity show their intention to do the same. Relational trust is expected to 'arise between individuals who repeatedly interact over time' (Kadefors, 2004: 176). As noted above, relational trust between these partners had been developed over two and a half years' of interaction, and was developed in combination with calculus-based trust. However, an alternative way to look at this 'trust' may be an understanding of corruption amongst actors for private gain to deliver a low-quality project. Although there was no strong evidence available for such corruption, it is acknowledged that such an assessment of 'trust' amongst actors undermining the necessity of maintaining accountability may easily contribute towards people's perception of collusion.

In the case of PPP, the development of such calculus-based trust is motivated by the risk distribution pattern in the PPP model. The public-sector partner intends to perform actions that are beneficial to the concessionaire, as they are legally bound to do, and also depends on the private-sector partner for their technical know-how and to carry out the work. The public-sector partner becomes more responsive through this dependence. As the key informant from the Second Vivekananda Bridge project explains:

In such partnerships, NHAI, concessionaire and IEs were involved. There was complete audit of the whole thing. As of referring from the industry side, I would say government responds. Sometimes they don't respond to queries of their appointed contractors. But it is different in PPP. If we send a notice in PPP of some pending job, they are bound to respond with the respect of legal risk. As we do have deliverables, they

also do have. Sometimes they become non-responsive for reasons like transfers of officers. This is rare and is beyond control of us.

(Interview 12, September 2010, Kolkata, India)

Hence, the public-sector actors' development of such trust in the concessionaire is supported by the risk distribution pattern of the PPP model. The above-mentioned quotation also presents management reform as the motivation for adopting PPP, showing how private-sector participation makes the public sector more responsive (Linder, 1999). However, such trust between two partners undermines the IEs' power to monitor the construction process to assure the quality of deliverables. The following quote from the literature supports this and puts it into a wider context:

One can attack the link between transparency and accountability; it is not necessarily true that more disclosure makes the agent behave better.

(Prat, 2005: 91)

Evidence from the non-participant observation of the meeting between both partners and the IE to discuss monthly progress shows that although the IE points out the unacceptable quality of deliverables or even construction techniques, the public-sector partners continue to trust their concessionaire and listen to them, rather than supporting the IEs for strict monitoring of the process. Here the public-sector partners are more concerned with resolving disputes between the private sector partners and the IEs, rather than advocating to secure the public's interest. This makes the IEs even more powerless in the situation.

## **9.7 Summary**

As evident from the above discussion, first of all, the wider population must be considered an important actor in the process of construction and maintenance. Hence, they must be internalised within the process by facilitating transparency (as disclosure of information) and the scope of public scrutiny. Although it might be argued that this is merely a question of strict implementation of other components of accountability, the argument for transparency becomes even stronger on the grounds that such a model is delivering public infrastructure using public money (in the long run) and, hence, public interests must be protected in this phase. In the terms of Heald and Hood (2006), inward transparency must be operationalised in real time as it becomes difficult to close any loopholes at a future point in time. Moreover, there is a strong perception of corruption



amongst the wider population, and any lack of implementation and lack of access to information adds to that perception. Transparency International defines corruption as the ‘misuse of invested power for personal gain’. As one of the main purposes of transparency in a nation with a high corruption perception index (CPI) is combating corruption, I argue even more strongly that transparency must be improved in this phase. Through such transparency, the causes of technical failure must be open to public scrutiny even in the case of lack of strict implementation. Unequal power relations and trust amongst actors are identified as the two main barriers to achieve such transparency.



## Section V: Conclusion

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### [Chapter 10]

## Chapter 10. Conclusion

*Goddess versus man, superstition versus progress, the people versus the state – mile by mile, India is struggling to modernize its national highway system, and in the process, itself.*

(*The New York Times*, 4 December 2005, online)<sup>63</sup>

### 10.1 Introduction

The above quotation is from a media report on the realities of modernising the highway system in India. This quotation upholds the struggle to modernise highways for the economic development of India, while the wider population fails to value such development, as they do not directly benefit from these kinds of projects. Moreover, it also shows the relevance of this research and justifies the need to investigate the transparency of these project development processes from a critical social science point of view. The starting point of this study was to explore the wider concept of ‘transparency’ beyond mere ‘disclosure of information’ to maintain accountability, even beyond the central debate on transparency in PPPs, reaching out to the understanding of the term in a democracy and in the development planning literature. It considers transparency not as an end in itself, but as a means to achieve other ends, such as accountability. It argues that there is always a purpose in disclosing information. Such an argument for an instrumental form of transparency can be developed based on Sen’s (1999) capability approach. It also maintains that transparency is narrowly defined within PPPs and that the existing framework is not competent to investigate the subject in a holistic way in the global South. As a result, this study offers a more inclusive and competent framework to investigate transparency throughout the whole life-cycle of a project.

The existing literature on transparency in PPP, especially in the global North, is mainly themed around whether PPPs deliver projects which are ‘better value for money’ and whether they are able to overcome the ‘democratic deficit’ created by political decisions in the traditional public-sector procurement model. However, as PPPs are adopted for infrastructure delivery in the global South without question, the question of transparency in PPP indisputably addresses different or additional sets of issues in that

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<sup>63</sup> <http://www.nytimes.com/2005/12/04/international/asia/04highway.html?pagewanted=all& r=0>  
accessed 1 June 2013

context. As already discussed in Chapter 4, the central aim of transparency in developing nations is to combat corruption, especially during partnership formation with the private sector.

## **10.2 The proposed framework**

The conceptual framework on transparency allows an investigation of the concept both in depth and breadth. In depth, transparency is investigated beyond ‘disclosure of information’. The framework considers the mechanisms of transparency, analyses whether the stated and bigger purposes of transparency were met, and explores barriers to it. In breadth, it investigates the mechanisms of transparency, its stated and bigger purposes, and barriers to it in the three major phases throughout the whole life-cycle of project development: Phase I: Project decision, PPP adoption, selection of form of PPP and partnership formation; Phase II: Project design and land development; and Phase III: Project construction and maintenance. Here, the main rationale of investigating transparency is to ensure that the public interest is protected within the decision-making processes, and that the documentation of such decision-making is accessible to the public for their scrutiny. These three phases require varying sets of criteria to assess the transparency of projects’ development process. Chapters 7, 8 and 9 are the three analysis chapters that investigate transparency across the three phases using the framework on ‘depth’. The following is a very brief discussion of the rationale behind the investigation of transparency in the three phases and challenges in collecting data.

Chapter 7 discussed transparency in three given cases in Phase I. The core PPP literature discusses transparency in PPP adoption and partnership formation. The main challenge of this phase was the restricted access to information, especially financial information. As projects are awarded to private-sector concessionaires based on financial information, such restricted access raises questions about the transparency of the process. Such a restriction was imposed partly due to the selection of the particular region for fieldwork and the sensitivity of the subject of research.

Chapter 8 applied the framework in Phase II. This phase focuses on the transparency of the land development process, including land identification, notification of land acquisition, and land acquisition. Land acquisition has been identified as a critical risk for PPP projects in the Indian context. However, the core PPP literature has not yet discussed the transparency of the land acquisition process. Since it is one of the severest

problems on the ground, it was impossible to carry out such research on transparency from a critical social science perspective without addressing how the wider population experiences the transparency of PPP project development.

Chapter 9 applied the framework in Phase III. Transparency is theoretically restricted in this phase of project development in the PPP model, as there are other components of accountability in place. Empirical evidence on this phase from all three cases, but especially from the Second Vivekananda Bridge and Ranchi Ring Road, show that it is important to strengthen the measures of transparency in this phase, as otherwise it affects public-sector accountability in the long run.

### **10.3 Reflecting on the research question and sub-questions**

This section reflects upon the research question and sub-questions in the three phases of development. The main research question of the study is: ‘How is transparency understood as a broader concept beyond mere “disclosure of information” throughout the project cycle in highway developments employing the PPP model in India?’

There are four sub-questions to be investigated in each phase of project development:

5. What are the mechanisms to operationalise transparency?
6. How are the stated purposes of transparency met?
7. How are the bigger purposes of transparency met?
8. What are the barriers to transparency?

In relation to the sub-question on the mechanism of transparency, the following criteria are considered, listed for each project phase, for the assessment of transparency in projects. These criteria are mainly identified from international organisations’ guidelines.

Table 10.1: Phase I (Project decision, PPP adoption, form of PPP selection, and partnership formation)

	Are there clear rationales (showing that public interests are protected in the decision)?	Are those rationales documented?	Are those documents easily accessible by public?
Project decision			
PPP adoption			
Selection of form of PPP			
Partnership formation			

**Are the stated purposes of transparency being met?**

- Do the public sector maintain their accountability about the project decision, PPP adoption, and form of PPP selection (as discussed in Section 4.5.1)?
- Does transparency help in combating corruption, especially during partnership formation (as discussed in Section 4.5.1)?

**Are the bigger purposes of transparency being met?**

- Do public-sector decisions go through public scrutiny?
- Is the instrumental role of transparency served?

**What are the barriers to transparency?**

**Criteria to assess transparency in Phase II: Project design and land development**

- Is project information proactively disseminated amongst the wider population?
- Is there clear information about the exact impact of a project on individual properties?
- Is there clear information about the basis and amount of compensation offered?
- Is the information disclosed in a timely manner?

- e. Did the affected population understand the information effectively?
- f. Was there any window to express their concern?
- g. Was their feedback incorporated into the design?

**How are the stated purposes of transparency being met?**

- Is infrastructure delivered in a corruption-free manner?
- Are the purposes of stakeholder involvement met?

**How are the bigger purposes of transparency being met?**

- Is the rule of democracy and informed consent followed?
- Does the project promote social justice?
- Is a culture of openness created?

**What are the barriers to transparency?**

Table 10.2: Phase III (Project construction and maintenance)

	Are there clear rules and regulations?	Are those available to the stakeholders?	Are they strictly implemented?
Project specifications			

**Are the stated purposes of transparency being met?**

- Are the previously decided obligations of actors and the clause regarding compensation being strictly implemented (as discussed in Section 4.5.1)?
- Is the previously decided performance contract being strictly implemented (as discussed in Section 4.5.1)?

**Are the bigger purposes of transparency being met?**

- Do the project specifications and standard contractual arrangements help potential private-sector investors to make realistic investment decisions?
- Do they ensure the public sector's accountability towards the wider population in terms of delivering the previously decided quality of project?

## **What are the barriers to transparency?**

### ***10.3.1 Phase I: Project decision, PPP adoption, selection of form of PPP and partnership formation***

Phase I investigates all the research questions in all three cases. Document analysis and semi-structured interviews from the Hazaribagh–Ranchi Expressway widening project, Ranchi Ring Road and the Second Vivekananda Bridge project show that projects are identified as part of the broader planning framework. In case of national highway projects (Hazaribagh–Ranchi Expressway widening project and Second Vivekananda Bridge project), the Ministry of Road Transport and Highways (MoRTH) is the planning authority, whereas for state highway projects (Ranchi Ring Road), it is the Greater Ranchi Development Authority in this case. The existing mechanism to proactively disclose information about project decisions of national highway projects is to publish policy documents on the website of the public-sector authority concerned. This conforms to the United Nations Development Programme (UNDP) guidelines on transparency in PPP.<sup>64</sup> In the case of Ranchi Ring Road, although the project is identified as part of the broader planning framework – and hence, there is a clear rationale for identification of the project – there is a lack of a formal mechanism to disclose information due to loss of documentation. Therefore, transparency is considered restricted. In the case of national highway projects, the formal mechanism is in place and the stated purpose – the public sector’s accountability – is maintained. However, due to the strict top-down planning approach, there is little scope for public scrutiny of the public sector’s decisions, except for voting. Schedler (1999) identifies voting as an indirect form of accountability in development programmes.

In case of PPP adoption, the rationales behind the decisions made are proactively disclosed through policy documents on the website of the public-sector authority concerned. However, as suggested by Leigland and Shugart (2006), no VFM analysis is carried out for such decision-making. Instead, semi-structured interviews with actors from both Ranchi Ring Road and the Second Vivekananda Bridge revealed that PPPs were adopted in these cases due to the public sector’s financial resource constraints. Disclosure of information about the decision-making criteria conforms to UNDP’s guidelines on transparency. The form of PPP is selected through a complicated process: it depends on the sector of infrastructure, and the geographical location of the project.

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<sup>64</sup> [http://pppue.undp.2margraf.com/en/08\\_2.htm](http://pppue.undp.2margraf.com/en/08_2.htm) accessed 1 June 2013



Semi-structured interviews with private-sector actors from both the projects located in Jharkhand also present the private sector's perception of risk as a deciding factor, as has been already identified by Froud (2003). Semi-structured interviews with actors from Ranchi Ring Road show that national and state highway authorities negotiate to decide which sections of highway are to be delivered by whom, and hence, who would fund them. Such negotiations are not unusual where resources are restricted. However, as the mechanisms of transparency in case of Ranchi Ring Road do not meet international development organisations' guidelines, it is important to evaluate whether such practices are beneficial to society. As discussed in Chapter 7, projects such as the Hazaribagh–Ranchi Expressway widening project and Ranchi Ring Road are imperative for an underdeveloped region like Jharkhand.

Attempts to access information from the relevant public-sector authorities and the RTI portal for all three projects reveal striking facts about transparency in partnership formation. Although core partners considered their project transparent because the bidding process was transparent, transparency for the wider population was limited, as the researcher could not get access to any financial information on concessionaire selection; even the 2005 RTI Act maintained their confidentiality. Such limited transparency, especially in case of PPP projects, does little to reduce people's perception of corruption, even though the researcher found no firm evidence of proven corruption. Following Sen (1999), a guaranteed degree of transparency in the decision-making process would combat people's perception of corruption via access to information. In this case, people's perception of corruption prevails, even though there may be no corruption and decisions are made on a fair basis. In addition, also according to Sen (1999), as the project developers fail to reflect upon affected communities' concern in Phase II, the affected community and the wider population lose trust in the system. This also raises questions about procedural justice in decision-making with regard to the participation of the wider community. The research findings from this phase showed limited scope for scrutiny of decision-making, and an instrumental form of transparency (Sen, 1999) was not achieved.

### ***10.3.2 Phase II: Project design and land development***

The project design and land development phase was the second phase in the project cycle, which was significant in terms of transparency. In this phase, the project starts taking physical shape and there is interaction with the wider population in a material

sense. As the empirical evidence shows, with a top-down planning approach, the conflicting interests of the wider population and the core developers of the project becomes visible in this phase. Transparency has been discussed in this phase in the PPP literature as a component of the framework of accountability. As understood from the Hazaribagh–Ranchi Expressway widening project and Ranchi Ring Road, the wider population, who are often excluded from areas like highway planning on the grounds of its technical nature, first encounter the physical project in this phase.

As semi-structured interviews, group interviews and field notes from the Hazaribagh–Ranchi Expressway widening project show, there is a combination of formal and informal mechanisms in place to disclose information about the exact impact of the project on the affected population. However, such information is often inaccurate and is not disclosed in a timely fashion, which would allow the affected communities a smooth rehabilitation. The affected communities are often left without information about the basis of compensation. Moreover, in spite of having legal cases due at court concerning their dissatisfaction about the compensation offered, their lands are acquired by the authorities and prepared for road development. This causes them to lose their trust in the system. Evidence from Ranchi Ring Road shows that core project developers are more accountable to the affected communities and are more flexible in terms of considering their concerns within the decision-making process.

In relation to the stated and bigger purposes of transparency, I have used the World Bank's (2008) guidelines on the rehabilitation process and Flyvbjerg *et al.*'s (2003) theory on stakeholder involvement for this phase. Both semi-structured interviews with core actors and group interviews with affected communities show that such purposes are only partially met, as affected communities are not considered stakeholders and are barely consulted from the early stage of project design, the exact information about land acquisition and compensation is not disseminated well in advance, and land is often physically acquired even though legal proceedings are still ongoing. The top-down planning approach and strong authoritative power of NHAI in India are identified as barriers to transparency. As the RTFCT Act 2013 had not yet been passed at the time of fieldwork, its implications were not reflected in the interviews and documents. I have reflected upon the anticipated implications of the Act in Chapter 8. The Social Impact Analysis (SIA), prescribed in the new Act, is expected to play the role of stakeholder involvement.

### ***10.3.3 Phase III: Project construction and maintenance***

The third significant phase in the project cycle is project construction and maintenance. In this phase, transparency is discussed in terms of any divergence of the project specification actually implemented from the one stipulated in the original contract. Document analysis, semi-structured interviews with core actors and non-participant observation from the cases of Ranchi Ring Road and the Second Vivekananda Bridge show that public-sector accountability towards the wider population regarding the quality of the project is compromised. The evidence shows that even so-called successful projects may remain unaccountable to the wider population in cases where monitoring to ensure strict implementation of the original specification is not strictly carried out, leading to severe corruption and misuse of public money. Restricted power is given to the independent engineers, who are officially the main actors in the operationalisation of transparency in this phase. Such restricted power is shown to be a barrier to transparency. This raises questions about the criteria used to measure project success.

## **10.4 Contribution of the research**

The proposed conceptual framework of transparency is considered a contribution towards the literature discussing transparency in PPPs. The framework provides a deeper understanding of transparency which goes beyond ‘disclosure of information’ and also beyond the partnership formation phase of development to include all three major phases of PPP in a project cycle. Following the current debate for complete transparency in PPP projects both in academia and practice,<sup>65</sup> this study has applied the framework to all three phases of the cycle. Greve and Hodge (2011) propose a similar framework, but focusing on different dimensions of transparency, such as ‘fullness of disclosure’, ‘time of disclosure’ and ‘accessibility of documents’ in different phases. The framework used in this study is new in terms of the identification of phases and investigation of the sub-questions on transparency across various phases.

Moreover, whereas the mainstream literature on decision-making in PPP-based mega-projects has discussed transparency in relation to stakeholder involvement (i.e. how improved transparency might have delivered improved projects), transparency as a tool

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<sup>65</sup> <http://www.firstpost.com/politics/let-their-be-transparency-in-ppp-projects-says-pm-81935.html>  
accessed 1 June 2013

to combat corruption has hardly been addressed. Considering combating corruption as one of the main purposes to operationalise transparency in the global South, the proposed conceptual framework can be said to have greater importance to actors in those countries.

The conceptual framework on transparency in question also makes a contribution towards the governance literature in terms of understanding the wider concept of transparency beyond ‘disclosure of information’. More importantly, this framework helps one understand why transparency is important by connecting theories on transparency with theories on democracy and justice. The exploration of barriers to the operationalisation of transparency, or to meeting its purposes, in PPP projects is also considered unique to the study.

## **10.5 Policy recommendations**

### ***10.5.1 Value for Money (VFM) analysis or public-sector comparators***

As discussed in Chapter 7, PPPs are now mainstreamed in the highway sector in India. As this is not an alternative mode of delivery, decisions on adopting PPP are not made on the grounds of a value for money (VFM) analysis. This is already identified in the literature (Leigland and Shugart, 2006). However, recommendation is made in favour of carrying out a comparative analysis for making decisions and documentation of the decision-making process to operationalise transparency in Phase I. Leigland and Shugart (2006) have a similar recommendation, that a comparative analysis must be carried out comparing the PPP option with a feasible model that can be delivered through the traditional method. This would also allow the public sector to obtain documentation of the alternative scenarios against which the decision to adopt PPP is made. Such information must be available in the public domain for public scrutiny. An analysis of this nature will also help the project developers to detail the design of a project from an early stage of decision-making, even before bids are invited, which is not the case at present.

### ***10.5.2 Improving transparency during project design and land development***

As discussed in Chapter 8, transparency during Phase II needs to be improved. This implies that all stages from project design to land identification, stakeholder participation and final design need to be carried out systematically, as opposed to the

haphazard way in which it is currently done to expedite the process. The RTFCT Act 2013 is likely to improve the situation, especially through its provision for the SIA, which must be prepared in consultation with the affected population. However, it will be interesting to see how the power equation changes, even with the existence of this Act, as a few states are already lobbying against it. This Act has been looked upon as a blockage to industrialisation; specifically, the clauses on the SIA and the need for approval of 70% of the affected communities are under attack, as they would delay the land acquisition process. State governments are seeking the inclusion of a clause on 'urgency', where land can be acquired under urgent circumstances without going through a lengthy process.<sup>66</sup>

In the timeline of the project cycle, information must be made available to the affected communities up to a certain time with the intention of incorporating feedback into the project design. After a certain stage in the project, as the design must be frozen, information on compensation must be disclosed to the affected communities, with the possibility for them to start legal proceedings if they are dissatisfied with the level of compensation. Finally, the legal cases must be resolved and payment must be actually made before the evacuation of properties. This study recommends considering the affected communities as 'stakeholders' of the project, also by the private-sector actors who are actually redesigning the project, to avoid future costs emerging because of resistance from dissatisfied affected communities. In terms of the RTFCT Act, the private-sector actors should be part of the group carrying out the SIA. If lobbyists are successful in pursuing the new national government to remove the clause on the SIA from the RTFCT Act, then private-sector investors would still step in to promote the SIA if they understood the essence of the process, and would do so for their own benefit to ensure the smooth progress of their investment.

### ***10.5.3 Improving regional experience of transparency***

State government departments are conceived as peripheral actors, as they work within the buffer area between the core actors and the wider population. They are also responsible for delivering an investment-friendly environment. The success or failure of projects largely depends on them. As discussed in Chapters 8 and 9, this study recommends that state government departments' ways of working have to be greatly

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<sup>66</sup> <http://timesofindia.indiatimes.com/india/UPAs-land-acquisition-law-likely-to-be-overhauled-with-many-states-seeking-recast/articleshow/37346439.cms> accessed 28 June 2014

improved in order to combat the wider population's perceptions of corruption, especially in the state of Jharkhand. Even though the RTI Act 2005, the RTFCT Act 2013 and other reactive measures of transparency are in place, it will largely depend on state government departments to improve public awareness of those Acts and respond promptly to people's queries to improve their experience with transparency – that is, disclosure of information and openness of decision-making by public-sector actors – in the region. Doing so would also help them to create a culture of openness where the wider population can engage in the process.

#### ***10.5.4 Empowering independent engineers for the sake of public accountability***

As discussed in Chapter 9, transparency must be improved in Phase III to assure public-sector accountability; the gap between IEs' responsibilities and their power to enforce private-sector concessionaires' obligations to action their recommendations affects the public sector's accountability towards the wider population. Hence, for the sake of the public gaining benefits from such projects, the role and power of the engineers in implementing project quality should be revisited at the national level. Again, as project- or individual-level amendments to the process would not be sufficient, such modifications need to be incorporated nationally at the concessionaire agreement level. As this agreement concerns legal obligations and penalties, the legislation should also be revisited to effect the strict implementation of penalties in cases where obligations are not met. This would empower the IEs during the process of monitoring construction. Independent engineers themselves should also have decision-making power regarding financial sanctions along with the public-sector partner (as representatives of the wider population) in cases where private-sector actors either incur cost increases or fail to meet their obligations in time. Lastly, improved transparency in the strict implementation of the contractual agreement would also help to combat corruption. Lack of such guidelines is slowing down the growth of the economy in the context of India.

### **10.6 Directions for future research**

Transparency is central to democracy (Florini, 2007). One potential direction for future research is to investigate transparency using the proposed conceptual framework of the study in infrastructure delivery through PPP in the context of the global North. As the demand to meet the guidelines of transparency arises from civil society in democracies,

it is timely to discuss the issue even in this context, especially as use of the PPP model for infrastructure delivery is strongly promoted by the New Public Management (NPM) perspective. Given the recent debate on private-sector participation in infrastructure delivery, it is opportune to strengthen the framework to investigate transparency in the infrastructure development process. This demand has also been realised by the United Nations' Economic Commission for Europe (UNECE). The PPP Alliance of UNECE was established to improve the awareness, capacity and skills of the public sector in developing successful PPPs in Europe. At only their third meeting, in Barcelona in 2004, they focused on 'Good Governance in Public Private Partnerships for Infrastructure Development'. Transparency was already being discussed as one of the core components of good governance. Application of the framework developed by this research can be potentially extended to the context of Europe as a potential future study.

In addition, as I had difficulties in accessing information in the state of Jharkhand, especially for Phase I, another direction for future research could be to apply the same framework in the western part of India, which has been very progressive in attracting private-sector investment into public infrastructure delivery and is expected to be more open about decision-making in such projects. Such states also have different political motivations. Even the possibility of carrying out a comparative analysis cannot be completely abandoned.

## **10.7 Concluding comments**

This study is an opportune one as, on the one hand, PPP is mainstreamed for infrastructure development in fast-growing economies like India, and on the other hand, there has been a strong anti-corruption movement (the popular manifestation of non-transparency) in India, initiated by civil society and drawing international attention. Moreover, there is a growing concern across the world about improving the governance of PPPs, especially as regards transparency. Although policymakers have voiced their opinion in favour of improved transparency in PPP projects, there is a need to develop such a framework. Combining these two contemporary movements, this study has attempted to develop criteria for assessing the transparency of PPP project development processes throughout the project cycle. In the era of rapid modernisation of highways using PPP, this piece of research alerts the nation to the sustainability and future of such infrastructure development, through the wider population's reaction to such development in a democracy.

This thesis is the result of more than four years of doctoral study, which has included two periods of fieldwork. However, it is also the outcome of my past industrial experience and long-term study of the academic literature on the governance of infrastructure development in developing nations. My search for an appropriate methodological and theoretical approach continued until I discovered critical realism and was able to shape my arguments on transparency, focusing on the restricted view of this concept held by policymakers and public-sector officials, in contrast with the bigger purpose of operationalising transparency.

This journey has been fruitful in terms of gaining insight into the wider and useful understanding of 'transparency' in terms of its mechanism, and the stated and bigger purposes of and barriers to transparency. As the evidence gathered for the study has shown, inclusive decision-making and stakeholder involvement are unfamiliar mechanisms to government officials working with a top-down planning approach and within a strong bureaucratic system. So, an evaluation of the system needs to be positioned using a particular point of view of justice that can provide a framework for evaluation; for instance, this study has adopted an approach of social justice in the context of democracy.

Finally, it should be noted that, in practice, it was highly challenging to carry out a study on transparency in the hostile atmosphere of the region of Jharkhand, a politically unstable and vulnerable region, known for its 'mafias', and particularly in a context where the region had had a very negative experience with a national highway project a few years before the study. However, in the end, it was considered worth spending time and energy on such an interesting and timely topic. This piece of research provides policymakers with a framework to understand transparency in its broader meanings and to better respond to the wider population's expectations from the infrastructure development process through PPP. As the lack of transparency is evident, this study poses a question about the continuation/stability of such processes, as they continue to provoke dissatisfaction in the wider population, restricting their access to effective participation in the process. Although the process of infrastructure development through PPP is legitimate at this point, questions about future legitimacy could potentially be raised where later steps in the process fail to achieve inclusion. Irrespective of the outcome, effective inclusion and informed consent would improve people's trust and satisfaction in the system and sanction its continuation.



## Appendices

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## Appendix A. List and transcript of semi-structured interviews

Int. No.	Project	Designation	Date	Location
<b>01</b>	Hazaribagh–Ranchi Expressway (HRE)	Public sector actor	27 August 2010	Jharkhand, India
<b>02</b>	HRE	The Resident Engineer (independent engineering firm)	September 2010	Jharkhand, India
<b>03</b>	HRE	Bridge Engineer (independent engineering firm)	September 2010	Jharkhand, India
<b>03A</b>	03 Follow up		September 2010	
<b>04</b>	HRE	Private sector actor	August 2011	Jharkhand, India
<b>05</b>	HRE and Ranchi Ring Road (RRR)	State government actor, State of Jharkhand	September 2010	Jharkhand, India
<b>06</b>	HRE and RRR	Gatekeeper	September 2010	Jharkhand, India
<b>07</b>	Ranchi Ring Road (RRR)	Private sector actor, JARDCL (Jharkhand Accelerated Road Development Construction Limited); Employee of private sector firm	September 2010	Jharkhand, India
<b>07A</b>	07 follow up		August 2011	
<b>08</b>	RRR	Private sector actor	September 2010	Jharkhand, India
<b>08A</b>	08 follow up		August 2011	
<b>09</b>	RRR	Project leader from public sector	September 2010	Jharkhand, India

<b>Int. No.</b>	<b>Project</b>	<b>Designation</b>	<b>Date</b>	<b>Location</b>
<b>10</b>	RRR	Project leader from private sector	September 2010	Jharkhand, India
<b>11</b>	RRR	Public Sector actor, Road Construction Department, Govt of Jharkhand	August 2011	Jharkhand, India
<b>12</b>	Second Vivekananda Bridge (SVB)	Private sector actor, Second Vivekananda Bridge Tollway Company; Ex-public sector actor	September 2010	Kolkata, India
<b>12A</b>	12 follow up		August 2011	
<b>13</b>	Second Vivekananda Bridge	Actor from Project Management Team from private sector side	15 September 2010	Kolkata, India
<b>14</b>	Second Vivekananda Bridge	One key informant	9 August 2011	Kolkata, India
<b>15</b>	General	Director of Commercial Confederation of India	August 2011	Delhi, India
<b>16</b>	General	Social worker with experience in the region	July 2011	Kolkata, India
<b>17</b>	HREL	affected actor by HRE project	July 2011	Jharkhand, India
<b>18</b>	HREL	Affected by HRE	July 2011	Jharkhand, India
<b>19</b>	HREL	Affected by HRE	July 2011	Jharkhand, India
<b>20</b>	HREL	Affected by HRE and also land broker	July 2011	Jharkhand, India
<b>21</b>	HREL	<i>Mukhiya</i> of the village near Ramgarh (head of the village)	August 2011	Jharkhand, India
<b>22</b>	RRR	Shopkeeper	August 2011	Tupudana, Jharkhand, India
<b>23</b>	RRR	Farmer	August 2011	Tupudana, Jharkhand, India

<b>Int. No.</b>	<b>Project</b>	<b>Designation</b>	<b>Date</b>	<b>Location</b>
<b>24</b>	RRR	Clerk	August 2011	Tupudana, Jharkhand, India
<b>25</b>	RRR	Retired persons	August 2011	Tupudana, Jharkhand, India
<b>26</b>	RRR	Food hawker	August 2011	Lalgutua, Jharkhand, India
<b>27</b>	RRR	Businessman (beneficiary)	August 2011	Kathiatar, Jharkhand, India

The following are the transcriptions of the interviews as listed in the table in Appendix A. It is to be noted that whereas some interviews were structured, others were unstructured. Interviews with the core partners are mainly structured; however, it was felt that at times the availability of knowledge was restricted by posing structured questions. So, mainly a set of question was presented first (that were in mind of the interviewer); but in the event, the actual flow of actual conversation might be different in order to allow the interviewee to present the case as he/she wants. In the case of the affected communities, the size and structure of the interview varies considerably. In such cases, the transcripts can resemble field notes, as presenting the image of an interviewer would have completely ended the case of data collection opportunity.

#### **Interview 01- August 2010, Jharkhand, India**

[Semi-structured interview with Project Director (PD), NHAI at NHAI office, Ranchi; 27 August 2010, with prior appointment]

Voice recording was not allowed. As PD mentioned, it was not allowed as per RTI act. Also, he mentioned that he is not allowed to talk about his personal views on things. Otherwise I can get all the documents. He also agreed on diary keeping, non-participant observation of a meeting between NHAI Delhi office officials and the state government. It was mentioned that I can attend one of these meetings on 6th of September, 2010. I might have to talk to the chief general manager, NHAI, who will have the highest authority official from NHAI attending such meeting. It will be decided only two days before the meeting that who is going to attend as the highest authority. He also agreed on focus group, but mentioned that I might need to be little bit flexible with time. His

schedule doesn't always depend on his wishes. If someone from the state government wants to meet him at a certain time, he has to go as it is in his own interest. That person is doing him a favour, so he cannot keep him waiting or decline to go. Otherwise his job will not be done.

He also praised the chief secretary of the Govt of Jharkhand a lot. He said that the present CS is very pro-active. He takes all the initiative for meetings. He said, 'He fixes the next meeting himself, he doesn't ask anyone for a date'. However, from his tone it was apparent that he takes it as a positive thing and means that if the CS doesn't do so it, other departments will not take action on time and will lag behind in the schedule. PD also mentioned that if he remains the CS for long time, there would be huge development in Jharkhand.

Interview:

1. Would you call this project BOT or DBFOT?
  - a. There was a consultant, CCPL, who designed the project for preparing bidding documents. Then the concessionaire was selected based on that report. However, the concessionaire then re-designed the project and then they are developing.
2. How is it different from traditional model in terms of your role and responsibilities?
  - a. Concessionaire is doing all the funding. There was no financial closure in traditional procurement model, which is also known as Engineering Procurement Contract (EPC). Here, the concessionaire appoints EPC, which is IL&FS itself for this project.
3. Would you like to be involved in a project with IL&FS in future?
  - a. Did not ask as the PD mentioned that he cannot give his opinion. And also, I thought it might not be possible for him to answer this at this early stage of project. (my view: things seem to be quite friendly until now).
4. How were IE selected?
  - a. Tender was sent out by NHAI. After receiving the tender, the concessionaire was asked to screen down to 2-3 companies. Their opinion is taken because they will pay half of the fee. Then the lowest bidder is taken from those 2-3 companies.
5. How often do you interact with CCPL?

- a. CCPL was involved at the early stage of the project to prepare pre-bidding document. They are not involved in the project anymore. They mainly interacted with NHAI Delhi office for the same.
6. Can you please elaborate on the land acquisition process?
  - a. Presently the stage of land acquisition is compensation distribution. The process of land acquisition is that first NHAI provides a land schedule to the state government as prepared by the preliminary consultant CCPL (I hope so?). While preparing the road alignment and schedule of land, the land acquisition department from the state government was also involved in the process in order to provide information about type of land, ownership and so on. Then it becomes the responsibility of the state government to acquire the land by a competent authority appointed by them. (at the cost of govt? NHAI?)
  - b. The concerned project mainly involves lands from three districts. Compensation is given to the owners of land. In case of religious structures, generally the structure belongs to a community. Hence, compensation (as calculated by the competent authority or community?) is paid to the community. (Is money the only issue?). In case of tube-well/ hand pumps, compensation (as decided by c.a. or drinking water dept?) is paid to the drinking water dept.
  - c. Who pays? Who decides how much to pay? Who receives? When is it actually implemented or replaced?
7. What are the other organizations or departments in Jharkhand you are interacting with for this project? Why?
  - a. Forest dept.
  - b. Electricity for safety?
  - c. Drinking water and sanitation
  - d. BSNL (telephone)
  - e. Other telephone lines (shift lines at dept.'s own cost?)
  - f. Here, the difference with EPC is that, in case of EPC, NHAI deposits the money to respective departments. But in case of PPP, it is concessionaire's responsibility to execute all the jobs. Electricity dept will supervise the whole process. And hence, NHAI will pay electricity department for their supervision and will reimburse concessionaire?

8. Who would be the contact person in NHAI/MoRTH for the planning of the project?
  - a. DGM, Technical, NHAI
  - b. GM
9. Can I conduct non-participant observation?
  - a. The only monthly meeting with all NHAI higher authority officials from Delhi on 6th September 2010. Chief Secretary will be there. He is proactive. This is the meeting that keeps the PD work on different issues for the next month.
10. Can I see minutes of meetings?
  - a. Yes.
11. Would you be interested in diary keeping?
  - a. Yes.
12. Can I arrange focus group?
  - a. Sure. But not sure about time.
13. Contact persons in other organization?
  - a. Electricity: [anonymous]
  - b. Forest: Principal chief conservator of forest (PCCF), [anonymous]
  - c. Drinking water and sanitation: [anonymous]
  - d. Land acquisition: [anonymous]
  - e. Mining: concessionaire's responsibility. Hence, they should have the contact. They should get a certificate from mining for excavation. [Why is it concessionaire's responsibility? Is it not governmental organization?]
14. General comments:
  - a. It is private sector's interest to finish up the project and start operating. That's why they wouldn't take even 6 months for financial closure. They will start construction very soon. (said for Barhi-Hazaribagh project) [how much time did they take for HREL?]

### **Interviews 02 & 03- September 2010, Jharkhand, India**

Guiding questions for semi-structured interview with the resident highway engineer and bridge engineer from Unihorn.

1. How long have you been associated with this project and in what capacity?  
The contract was signed on 6<sup>th</sup> August 2010 between NHAI and Unihorn.

2. Where do you place yourself or your company in this partnership? How would you describe your roles and responsibility?

We are sandwiched b/w NHAI and concessionaire. Responsibility is quality control of project. It is to check bridge, pavement design as per schedule provided in the concession agreement.

3. Whose interest are you looking at in this project and how?

For NHAI.

4. PPPs are known for encouraging private sector's innovation in order to provide better value for money of a project. How strict or flexible would you be with private sector's designing issues in this case? How do you think this model is different from EPC?

Tender document prepared both by NHAI and concessionaire. Construction sub-contracted to GR Infra.

5. What is your engagement with the state government here? Why and how do you interact with them?

IE doesn't interact at all. It is the responsibility of NHAI.

6. How have your experience been so far with this project in Jharkhand? What were/are the difficult areas associated with the execution of the project? Who has helped you to overcome such problems and how?

It's just one month's baby. Might answer your question two years down the line from now.

7. What are the organization/departments other than NHAI and IL&FS that you have to deal with regarding this project and why?

No

8. How do you interact with them? How do NHAI and ILFS help you out?

Not applicable

9. How important is it to develop a good relation with other actors in the project?

What matters is the nature of a job/ whether it's a challenging job. The scope of work, and type of project matters rather than relation with stakeholder.

10. What are the critical areas that you have to be aware of while working on a project in Jharkhand? Please explain both in terms of natural resources and political condition.

Doesn't matter.



11. I came across a news article regarding fire breakout near highway last year in Ramgarh district. Would you please elaborate the problem? Who were involved in the whole process and how was it taken care of?

We were not involved at that stage. What we had heard of is state government changed the alignment of the road and made a road parallel to that.

12. I also came across another newspaper article, which says that there was delay in construction due to some land acquisition problem for this project. It also mentions that the chief secretary accelerated the project. Are you aware of such a situation?

For this project, we haven't heard this. Land acquisition is on time so far. Actually we are ahead of time according to our milestones.

13. How is it different to work in a state with president's rule and political instability in comparison to other projects? What are the additional risks?

NA

14. What are good industry practices?

Following proper procedure on the basis of IRC and MoRTH guidelines

15. Can you please suggest me anyone else whom I **should** talk to regarding this project?

NHAI and concessionaire

16. How and when were you selected as IC for this project? Do you have any prior work experience with NHAI or ILFS?

(not asked?)

17. Can I please contact you later on, maybe through email or phone, if I need any more information?

Additional comments:

Although I targeted to interview the resident engineer, it became a focus group as he was not comfortable answering alone and requested the bridge engineer to participate. In my opinion, the later was more confident in answering and also experienced. I had the opportunity to talk to him for longer as he gave me a ride to the office. He has been involved in such projects for a long time. Both of them are local people but they had worked in other regions so far. One mentioned that the first class companies in highway PPP are L&T, Gammon and Hindustan. All rest can be put in the second rank. These big companies do a lot of homework before bidding for a project. They keep a close eye on usage of road, they carry on surveys very frequently. That's why these companies

were not bidding for toll projects at all. Sometimes these companies withdraw their bidding application if things change.

On the answer to my question on whose responsibility is it if there is some functional failure of highway, there were different opinions. While one confirmed that it is the responsibility of IE to assure quality of work and take the risk of faulty work, Sanjay wasn't sure. However, both of them said that there is no cost implication for IE on the basis of the contract. He mentioned taking example that concessionaire is always freed because they got things approved from IE. Although he mentioned that this project receives VGF, the bridge engineer disagreed. And also, it is not mentioned in the concession agreement at all.

My perspective:

IE seems to be the most 'non-involved' partner at this time. Also, it might be because of they are in the process of setting up their office and the resident engineer is not the highest authority. There are only 3 people there in Ranchi from their side so far.

The resident engineer is not open to giving his views which might be because he has been instructed by NHAI official who has again got permission from above. They might think I'm interrogating as NHAI PD mentioned. Otherwise he is not very fluent with the terms and conditions of the project yet. It gives me a feeling that it might not be the right status of the project to talk about. They were basically trying to defend NHAI's position? They don't have to interact with state government. They don't have access to state government meetings. They are invited in NHAI internal meetings though. Any implication for power relationship?

There was some discussion on open and closed toll. IE people were constantly referring to the concession agreements as if they don't want to make any controversial comment?

#### **Interview 04- August 2011, Jharkhand, India**

Status of project so far:

The project has achieved 37% physical progress so far, which is within schedule as per the work programme. Since August 2010 two milestones have been achieved as per condition.

We have good experience so far in terms of concessionaire agreement. The agreement is perfect to fulfil the condition precedents. There are timely obligations for stakeholders to complete the project within time. Technical specifications are as per IRC code of provision. Steps are very specific.

Regarding customization, earlier the agreement went to all actors and has been finalized. A contract has been obtained. The concession period is 20 years. The biannual payment of annuity is 64.03 crore.

Land acquisition took lot of time. For forest land, it took almost two years. NHAI initiated the project in 2009 March. 50% land has been provided as per contract. Now this 50% is being upgraded to 80%. There is one Land Acquisition Officer on behalf of NHAI. The district LAO first gives a notification. He informs state government and appoints a competent authority to proceed with the process. This competent authority then converts the land from private ownership. There are clauses in the NHAI Act, 1965, 3a-e, to acquire the land. However, it is easier for NHAI to acquire land rather than state government.

It is also difficult to secure approval from railway. Approval of GAD is difficult. It took almost 7-8 months. It took another 6 months for design approval from head office.

From railway they have made a rule that proof checking of structure must be done by IITs. Forty per cent of costs have to be deposited to railway by NHAI.

State governments' attitude to the project was positive. They gave immediate attention whenever we needed their help. The system at the lower level has collapsed. Junior level staffs in the government are corrupted. If this project has suffered anyhow, that is because of such junior staff.

The law and order in the state has completely collapsed. Please don't write it down in black and white. There was an event three months ago. Our construction site was attacked. They burnt approx fifty cars in just half an hour. The state government is incapable of tackling such situation.

We do have a three-tier system.

#### **Interview 05- September 2010, Jharkhand, India**

Interview with Principal Chief Conservator of forest:

1. What is the process for a national highway project (NHAI with PPP) to take approval from you for the alignment of the road and execution work? When do they contact you? Who takes the approval? Who else is generally involved in the process?
2. How is the process different for state highways?
3. Do you directly approve the project or do you cross check with some other authority? If yes, then whom and why? At what stage?
4. What could the possible conflicts be? How do you try to resolve conflicts?
5. Can you please describe a public hearing process? When is it called and what happens there?
6. What is the status of the projects of Hazaribagh-Ranchi and Barhi-Hazaribagh? Was there any conflict with the alignment those two projects? If yes, would you please describe what the conflict was about, who was involved and how the problem was resolved?
7. I came across a newspaper article mentioning that the Barhi-Hazaribagh highway was going through the middle of the Hazaribagh National Park. There was a controversy. There was also a railway aligned through the park. Could you please elaborate what happened? How was the issue resolved? How was the final decision taken? Who initiated the process? Who cooperated? Who protested?
8. Is there any document related to these two projects you recommend me to look at?
9. Would you recommend me to someone else who I should talk to about these two projects?

I spoke to the PCCF at his office on 3 September, 2010 with my letter of introduction and the approval from NHAI for doing this. I did not go into very specific enquiries. Rather, I generally asked him about the procedure for highway projects to secure approval from Forest department and Sanctuary and wild life conservatory dept. According to Forest Conservation Act, 1980, a forest land cannot be used for non-forestry purposes without the consent of Environment and Forest Dept. Now the question is what is a forest land? Any land as per dictionary defined as forest and any land recorded as forest in any government document should be considered as forest.

Depending on Indian Forest Land, 1927, lands notified as forest in the survey documents. Survey documents generally have one column on nature of land. Lands

marked as *jangaljharis* in those documents are also considered as forest lands. One tricky thing is that it is not essential for forest lands to have trees on them.

Now for these highway road-widening projects, the highway authority needs to acquire forest lands. Hence, they need to request the diversion of forest land. They provide a land schedule to the forest department and revenue dept with the diversion proposal form A, available at [jharenvis.com](http://jharenvis.com). The categories are description of project, area, nature, cost-benefit analysis and displacement plan etc. on the basis of the proposal submitted, a field inspection is done by the environment department, number and cost of trees are calculated, then the report goes to the MoEF through the state government. Then the proposal is forwarded to the Forest Advisory committee. They determine merit and demerits of such projects and recommendations. Then it is forwarded to the honourable minister, who is not bound to take a decision based on the recommendation only. He can take his own decision based on records.

MoEF convey in principal approval with condition. Then they get the stage I clearance. Then it is forwarded to the supreme court, where net present value is calculated. Generally the value is 6.26 lakhs per hectare to 9 lakhs per hectare.

For govt organization like NHAI, they pay the value of twice the land they are occupying. For private parties, for 100 acre of such land, they pay the value of 100 acre of non-notified area and compensation for 100 acre of forest land.

Now based on this compensation, forest clearance is granted with the approval of this compliance report, which is also known as stage 2 clearance. The concerned land cannot be used for any purpose before the project secures the stage 2 clearance.

Now, if the land in question falls under wild life, sanctuary, the user agency has to verify the proposal. Then the chief wild life warden makes a presentation before the state advisory board which may or may not approve the project. If it is approved, then it goes to the national board for wild life for approval. The national board then carry out elaborate inspection, and then it goes to the supreme court for interrogatory application. Then it is forwarded to the MoEF who investigates the case on the basis of Environment /protection Act, 1986. They also have to get approval from Pollution control board. It is required to have EIA and EMP for the project at that stage.

Once everything is finalized, it is sent to GoI. A public hearing is conducted at the state pollution control board level with the user agency. However, after deliberation, GoI grant permission.

#### **Interview 06- September 2010, Jharkhand, India**

Interview with the official from CCL:

Although it was my intention to formally talk to the concerned CCL official on their involvement with highway projects, and I applied for permission from the government organisation for the same, it wasn't possible to talk to them as the higher authority denied their involvement with such highway projects. However, during my approach to them for such permission and from other newspaper articles, it became apparent that at some point, the state government and the national highway wanted to involve them in the project. Finally, they couldn't do so as CCL got the support from the central government for not being involved in the issue. In spite of CCL not being involved in highway projects, and there is no formal procedure for the concessionaire or NHAI to acquire clearance from CCL before finalizing the alignment of road, it seems extremely important for such projects to have such a process on the safety issue of road users.

*Here I describe the formal procedure of highway alignment in a mining area. As CCL describes, (off the record) Highway authorities are not supposed to construct road near CCL coalfield area. Maps of mineral resource area are available through the geological survey of India and CMPDI. Highway authorities are supposed to get hold of such maps and cross check their alignment. On the other hand, as newspaper describes, CCL is not supposed to do mining work near highways.*

The issue with the Hazaribagh-Ranchi highway project actually involved some issue, which was not in conflict with the formal procedure but was due to illegal mining. CCL generally fills up the tunnels after they finish mining work at a site near the Kujju colliery in Ramgarh district. Hence, there was one abandoned site of CCL. Local residents started doing mining work illegally after the site was closed. Now, there was some delay on filling up the site from the part of CCL. On an interview as per newspaper report, a resident mentioned that these abandoned sites still have efficient coal. These minerals might be not of great value for a big company like CCL, but individuals can earn a living depending on it. Hence, there was some illegal mining going on. Now there was conflict between the state road construction department, the

police department and CCL, whose responsibility it is to stop such illegal mining. However, there was some fire break-out due to the illegal mining under the Kujju bypass of Hazaribagh-Ranchi project near Lohagate of Kujju colliary, and the fire was identified by the local residents. The fire was spread to a 3000 m<sup>2</sup> area. Then CCL started filling up the tunnel soon in order to stop the fire from spreading and they built an alternative road parallel to the prior one, while the state government secured the forest clearance for such extension of road.

There were similar issues with some other highway projects, for example, the Tata-Ranchi-Barhi. There were illegal coal mines beneath the highway near Mandughati in Ramgarh. There were five tunnels dug by illegal miners connecting either side of the road. TOI reported last June that illegal mining might affect this highway. NH having heavy truck-loads over these tunnels might cause cracks, pot holes and blisters. Here also it was mentioned that the Pundy project is no longer viable for CCL but sufficient for illegal miners to earn a living.

Everyone wants to prove that it is the responsibility of another person. CCL blames the state government for illegal mining. CCL GM is to seek permission from the forest department to build an alternate highway. NH chief engineer (Ranchi Road division) had forwarded this info to NHAI so that they get in touch with CCL about stopping mining activity.

Gupta blames CCL for delaying the tunnel filling up activity beneath NH. Although CCL has appointed an Australian company to do the filling up activity more scientifically, there was delay in the whole process.

### **Interview 07- September 2010, Jharkhand, India**

Conversation with Manish Misra,

#### **1. Your role in JARDCL/JRPICL**

He is an employee of ITNL. In JARDCL, he is the planning, monitoring and contract engineer.

#### **2. Activities you do during the planning and implementation stage**

Taking the design input from DPR, he derives the quantity, derives and acquires the machinery, manpower and then does the planning and monitoring.

[Should have asked what do you mean by planning?]

3. Clearances you have to acquire officially/unofficially; experience so far in a state with changing government

There are two categories for such clearance. One is condition precedent. Lenders' engineers focus on this before bringing money to the project. These are certain conditions that state govt / rather client has to provide before construction starts.

The second thing is pre-construction clearances. It is government's responsibility to secure such clearances but the concessionaire intervenes to expedite the process. Generally every national and state highway project and any road with minimum 30km length has to secure clearances from MoEF. RRR did not have to take that, as it is a green highway and not a state highway as yet. There was no forestland in RRR. In case of RPR, there was forest land. They signed the contract in September, 2009 (?). The government is supposed to handover all of additional land by 9 months. However, in this case, they haven't received clearance from forest dept yet, and hence, the construction is getting delayed. As per contract, you can ask for penalty. But the concessionaire doesn't want to claim penalties as they don't want to spoil the relation with government.

Sometimes you might have encroachment on the land even after handing over. However, those encroachments are illegal. And you cannot claim penalty for the illegal encroachment. The contractor has to intervene and negotiate in such situations. They have to remove those illegal encroachments so that they can carry out their work at their own cost. Sometimes contractor pays illegally to remove those encroachments and make the land available for construction.

Regarding changing govt, it actually depends on the person sitting on the other side of the table. Sometimes it becomes easier; sometimes it takes more time. You have to take decision on the table. If the state is under president's rule, and the IAS officer doesn't have to report to his immediate boss as no one is there, then the process gets faster. In case of a stable government, this person will have a boss and he has to get permission from him, so it will get delayed. However, the whole process depends on the person taking such decision. In case of DPR, we give strict instruction to keep the alignment within already acquired land and keep the LA requirement to a bare minimum. In some cases, the acquired land doesn't match with the new requirement at all due to our design specification. We try to compromise as much as we can do to save time from LA process and



start construction. We have changed design speed for some stretch. In that case, the already acquired land remains under government quota, and they get new land acquirement requirements. It is different that Mr. X who used to own the land has been moved to a different place by now.

[Also came to know about something interesting completely unofficial:

Since government pays good compensation for such lands, people get interested to sell out their land if it is lying vacant. And they enquire at the project office about whether their land is coming under the project area?]

4. How do the differences between the design on paper and implementation on site impact the whole process?

It is the responsibility of the land acquisition department to transfer drawings on the field. Then they build fencing or mark their boundary by boulders. They place these boulder stones with a 200m spacing. The government acquires 60 m wide land while only 31m is used for constructing the road. Firstly, it is difficult to exactly transfer something onto a field from a drawing. Secondly, it is mainly junior employees who work in the field and they get influenced by property owners and change the alignment. For example, for one of our projects, one 3-4 km stretch is not as per drawing at all. These junior staff got influenced.

5. Can you please describe the interaction process with mining dept/ CCL?

If your road alignment overlaps with the mining area, then it should be pointed out at the DPR preparation stage. Otherwise, for any excavation work below 0.6m, we need to get clearance from the mining dept and even give them loyalty.

6. Although it is the responsibility of state government, do you need to intervene in the process? Why? How about compensation?

Already discussed.

7. Your experience with land acquisition process? What are the problem areas: no documentation, lack of cooperation from govt side, lack of coordination during alignment identification? Lack of coordination between departments of same company or other private sector actors?

Not asked. Already discussed.

8. How about the clearance case for Patrattu Dam project?

In that case, the land was owned by Patratu Dam thermal power plant. And hence, when we had to take clearance from them, they objected as it is risky for them to have any construction and excavation work within 25km. We will have vibration during construction, and hence, they were threatened. Their prime interest was Dam, so they were thinking about it. We will construct road anyway, as it is our prime interest; Dam is secondary for us. However, they are not private property owners, they have equal power like other govt depts. So, the process was elongated. We had to listen to them. We had to give due consideration to their concern and took necessary steps.

9. What if land is not handed over or has encroachment while commencing construction in practice? You take initiative to expedite the process or defer construction?

Already discussed.

10. Partnership relation, how important? What happens in case of dispute? When is something considered dispute? How can it be resolved amicably?

Please ask the director.

11. Trust level between partners? How is it improved over time?

Not asked?

12. Interaction pattern and frequency between partners

Participants come from different disciplinary backgrounds, conflict in interest

In case of any railway crossing, we need permission from railway authority. They also supervise the whole work at a charge.

Our frequency of meeting is at least monthly with the independent consultant. IC is generally appointed by the client. And paid by both client and concessionaire. But in our case, as GoJ said they don't want to pay, JRPICL is paying them. From the concessionaire side, we also have a supervision team. They are also paid by us. IC supervises on a random basis 20-30% of the work while supervision team checks 100% work. It is optional for concessionaire to have supervisory team. We have at least one meeting per week with supervisory team. However, if anything comes up, then we meet them at any time on an urgent basis, face to face interaction.

For RRR we have nine bankers. The main one is the Bank of India. There are external consultancy firms who rate us. They rate projects and contractors. Based on those ratings, banks and lenders decide whether they want to invest. Sometimes we approach them. They also approach us if they think it is going to be a good project and they would get good returns.

Since the lenders are non-technical, they appoint lender engineers, independent firms or individuals to supervise the progress of the work on their behalf. We send monthly progress reports to those lender engineers. They also do a site visit 2-3 times in a month to oversee the progress. Since we are not from a financial background, our accounts department looks after the financial analysis.

The concessionaire never interacts with the general population in normal cases. However, as the contractors have to remove illegal encroachment, and actually have to work on the field at the site, they sometimes do interact with the population.

For other service lines, we provide underground pipes on a provisional basis. This road is going to be under our maintenance for the next 15 years. We might not have any requirement today, but it might come up tomorrow. And if any other department wants to provide any service line in our land, they have to take our permission. For example, the PWD is taking permission from us for providing water lines through our land in case of RRR. Otherwise if the road gets damaged, we might say this is because of their interference and deny any cost implication on us.

For example, building of bus stop is under our scope. However, the DPR was prepared in 2003. There was a requirement of one bus stop and a location was also shown. Since the cost was calculated based on one number of bus stop, we will stick to that number. The actual requirement of numbers might have been changed by now in 2010 though. Additional bus stops will have cost implication and that would be change of scope. Hence, we need to make that officially approved. However, now we will decide the location of the bus stop while visiting the site with IC and if he approves, we will relocate the bus stop. We won't stick to the location specified 7 years ago as we want to make our design efficient.

It is also in our scope to provide a service road for slow moving vehicles and over-bridge or underpass for movement between service roads. Although L&T is contractor, they have become large enough as a concessionaire. While they become concessionaire, they do the construction in house, their supervision team can also be in house. Hence, they can provide a whole package.

Nowadays developers are bidding for road projects while they are also buying large chunk of lands along the road. Their main target is to develop these lands for big projects such as townships. This is where they will get project return from. They don't care about return from toll roads. As Reliance bid for Jaipur ring road. Generally govt acquires 60m land width-wise; they asked govt to acquire 200m for them as they had plans for township. It did not work out as govt could not acquire 200m land.

Similarly JP Associates are concessionaire for Delhi-Agra ring road (?) and they are also building a township on the road. [This is way of internalizing external uncertainties for investors investing in toll project?]

RAP and indigenous people development plan are made on paper only. They are never implemented in practice. Sometimes we do projects like school building, but that's it.

### **Interview 08- September 2010, Jharkhand, India**

Guiding questions for conversation with Asst Vice President, IL&FS, JARDCL

Regarding investment decision:

1. Risks for annuity projects, in highway sector
2. Additional risk in a state with changing government; during pre-construction, construction and post construction stage
3. What could have been the additional risks for toll project? What additional factors you would keep in mind while bidding for such a project here?
4. How does the development policy in same sector but different regions influence your decision?
5. How do development policies in same region but different sectors influence decisions?

6. How does the relation between centre and state government influence the whole process?

Ancillary factors:

7. How does the condition and situation of other existing or proposed roads influence investor's decision?
8. What are the other factors that are beyond the control of the concessionaire but they consider important ones for making investment decision?
9. How do the decisions made in dispute resolution of other contemporary projects influence internal decisions?
10. Ancillary things you had to take care of other than core activities
11. How has your experience been so far with this project in Jharkhand? What were/ are the difficult areas associated with formation of partnership and execution of the project? Who has helped you to overcome such problems and how?
12. Had there been any situation when you couldn't find out the solution in a contractual agreement? What was it and how was it resolved? Why was it done this way?

Partnership relations:

13. Core and peripheral partners; qualities of partners; split of responsibility or cooperation: Who are passive stakeholders? How do the lenders influence the internal decisions?
14. Partner relationship; sense of partnership, sense of ownership; how can this be improved?
15. Interaction pattern and frequency between partners
16. Trust amongst partners; how does it get improved with the progress of a project?
17. Factors for enabling or barrier for cooperation
18. Compatibility between working ways of public and private sectors; quality that matters between stakeholders in the execution stage
19. How did your working relation change as the project was progressing? Was there any other factor that helped you to improve the relation?
20. What are the conflict areas of the partners to the consortium? How do they interact to resolve those conflicts? What media do they use? How does one's disciplinary background matter? Power relationship?

This interview was done over the telephone with the project director of state highway projects at Ranchi. I was calling from Kolkata while he was in Ranchi. I had sent him a draft questionnaire beforehand. We had to do it over the phone as he had to leave Ranchi when I was there. This was due to a meeting at his head office which was fixed without any prior notice. He himself offered to give me a telephone interview. Also, when I was at his office, it was very difficult to talk to him for long as he has a very busy schedule and he keeps on getting telephone calls that he has to attend to from his bosses at his head office, and also from NHAI office.

I told him that I'm going to record this interview. This interview will be used as data for my research. And also, this participation is on voluntary basis and he can skip any question if he doesn't want to answer.

Here is the transcription for the interview:

Interviewer (I): the first set of questions is based on investment decisions. So, if I ask you what are the risks for annuity projects, specially in highway sector. How would you go for it?

SM: in the highway sector, the construction risks are there. Because our concession period is including construction period, which is 2.5 years. So, we have to complete our construction in 2.5 years. So, if due to the site condition, we are not able to complete our construction in 2.5 years, then our annuity gets delayed. So, the return, of what we are investing now, the return will get delayed. The total concession period is 17.5 yrs. So, if we are completing our project in 3 yrs, then, half yr, one annuity payment we are loosing. That's the biggest risk. Then during construction, a lot of uncertainties are there. Specially in Jharkhand, a lot of anti-social elements are there nafra duties are there. They try to disturb the construction procedure. They can again delay the construction and the construction cost can go up. Because of certain uncertainties on the site, the cost might go up. For example, earlier if it was 100 crore rupee, it might now become 110 crore rupee. So, 10 crore is the net loss of the company. These two are the major risks. Other than that, the obligations of the government of Jharkhand. Like land acquisition. That they have to provide encumbrance-free land to the concessionaire. But due to the procedural delay in land acquisition, and shifting of utilities within the road boundary, lot of project may candidate. Like in Ranchi Ring Road, the government should have handed over the land to the concessionaire by [...], but till date, complete land has not been handed over. So, it might delay the completion of project.

I: can I ask you something? I think in the contractual agreement there is one clause on compensation if the land acquisition is delayed.....

SM: yes, the compensation is there, but with the state government, if we try to claim it, that compensation procedure will get delayed and we might not even get it at all. Under the political condition, and their working procedure... Other government will come after one year. And they will say, oh now we have to study all the document, and we have to go through the proposal... then we have to find out whether the delay was genuinely on the part of the government. So ultimately we may get some compensation, but the procedure is quite lengthy. So, that risk is there.

I: could you please describe a little bit about the additional risks if it was not a annuity project, but a toll project.

SM: actually in annuity project, at least we are sure that you will get a fixed annuity payment every six months from the government of Jharkhand as a return to what we have invested so far. But for the toll project, although we do all the traffic study and etc before investing in a project, still the usage of road is not in your hand. Traffic actual flying on the road after the commissioning of the road is quite uncertain. The original traffic on the road before extension of the road might get deflected due to toll plaza. May some alternative route. Through the villages some heavy traffic might try to pass through to avoid the paying of the toll. So, that tolling poses a problem.

I: is it just because of tolling that people take some other route?

SM: generally there is a condition in the agreement of tolling road that the government or the authority, the road authority avoid providing alternative route for the passer by between that origin and destination. But there are local shortcuts they prefer it. It will not be any good road or highway. But passengers might take some village road, one way lane, pakka road or something like that to make shortcut. So, that is the risk with toll project. And because of the handling of cash, specially in the night time in a state like Jharkhand, there will be always risk of being loot at the night.

I: how does the development policy in same sector but other regions influence the investment decision? Like if there are two projects in Jharkhand and Rajasthan, how would ILFS make a decision on where to invest?

SM: whether the conditions of working are conducive for the concessionaire. Second thing is material for construction. The construction material plays the biggest role in the process. So, we have to look at whether the construction materials are available within 30 kms of the construction site. If the source of construction material is 100km away from the site, then there will be a lot of transportation cost involved in the whole process. So, these are the two reasons. And like the state of Jharkhand, here the conditions for construction are not very conducive. But there are plenty of construction materials. Also, in Jharkhand, the development is in very nascent stage. So, there is a future for growth. So, there is lot of future potential, scope. A company also looks for future scope. We have just started with one or two projects, that is why we might have some difficulties. But in the long run, the state has potential to grow. Companies prefer regions that have potential for future growth. So, may be after 3-4 yrs, a good return will come.

I: how do the development policies in same region but different sectors influence the process?

SM: our company ILFS transportation deals only with highways. Other verticals of ILFS might be interested in other sectors. But I'm not aware of it. Like ILFS industrial [...] is investing in [...] but our company is interested in highways only.

I: how does the relation between central and state governments influence the process, if it influences it at all?

SM: in our case, since we have signed a contract with the government of Jharkhand, in our case, the central government doesn't come into picture. We have to give the final product to the state government and they will pay us an annuity. In NHAI projects, central government plays some role. But, in our case the central government doesn't come into picture.

I: what are the conditions that are beyond the control of the concessionaire but that they consider as important?

SM: political instability, in every six month we get new government. Land acquisition. Only these things.

I: any situation that you were not prepared for and was not mentioned



SM: whatever the situation is, we deal with this case by case. There is no problem in handling those problems. The only thing is if it has any financial implication. There is nothing which cannot be solved.

I: last set of question on partnership relation. What should be qualities of partners when you are getting into a PPP?

SM: main thing is approach of the government official towards the development authority. We are fortunate that senior officers from the state government have been very positive towards the development of highway. We receive full cooperation from the government departments. That is what a private partner need from his partners.

I: split of responsibilities?

SM: obligations of the concessionaire, the concessionaire can only proceed and the obligations of the government.... There are mainly three/ four such obligations for the government. It is the moral responsibility of the concessionaire to assist the government partner to discharge their obligations and we are doing that. Land acquisition and utility shifting like electrical poles, telephone line, it is obligation of government, but we are helping them out. Water lines also. Coordination part with other departments, we are doing that. Amount wise, the amount of land acquisition and utility shifting has to be deposited by the government of Jharkhand. We are preparing the demand notes on behalf of the department, and submitting to the government for early disposal of project approval. As concessionaire we are fully cooperating and helping government in discharging their obligations.

I: how is the sense of partnership and sense of ownership important?

SM: it is absolutely important. As concessionaires, we have to be here almost for five years including securing approval and until completion. So, unless we have a sense of ownership, we cannot run the show. The government has handed over the road to use for 17.5 yrs period. The construction period is 2.5 yrs. And the maintenance period is 15 yrs. So, the road will be with us for 17.5 yrs. And for that whole concession period, the responsibility is with us. We take that responsibility. And for every inch of the road, we will try to maintain as nicely as possible. And the government has handed over the asset to us. We will try to maintain it as nicely as possible.

I: how is the trust amongst partners important and how does it get improved over time?

SM: it gets improved day by day. 2.5 yrs back, when we landed at Jharkhand, there was only PD from the government side. And slowly, slowly, government has to hand over the asset to the private partner. Hence, the government must have the confidence in the private partner. In order to develop that confidence in the government, the private sector has to show that sincerity and dedication to their work. So, during the preparation of the detail project report, bidding and also during the start of execution, the private partner has to show the utmost dedication and sincerity to the project. That whatever interest you are having in the concessionaire, is being fulfilled. It is up to the satisfaction level of the government of Jharkhand. Ultimately, it is the client or the employer is the government of Jharkhand. We are partners also and we have a relationship of client and concessionaire also. So, ultimately the government of Jharkhand has to develop their confidence. It has to perform. If the concessionaire is performing well. And the quality of work being delivered is good, then the confidence will be developed itself. And I am very happy to say that between the government of Jharkhand and ILFS, there is a very good level of understanding.

I: enabling or barriers for cooperation in contract?

SM: the PPP model, coordinating company. JARDCL govt is a partner to it. And private sector is also partner. So, whatever the problem is, JARDCL should be able to handle it. The conditions in the contract have been designed keeping in mind the limitations in the government and the support the government can get from the concessionaire. And generally the conditions are okay.

I: this is the last question. There are different private sector members in the consortium. And they have different interests. So, there are conflicts of interest sometimes. Do you think disciplinary background becomes a problem? If yes, what media do they use to overcome such problem?

SM: background of partner is important. Selection of partner is very important for if it is going into an arbitration process. Generally, we do the work as per the satisfaction level of government of Jharkhand. So, there is no intention of going for the claims or going for the arbitration. If certain obligations of the government are not being fulfilled, we will try to accommodate. We will try to help the government in sorting out their obligation. But if some private partner wants to against it... see I'll give you example... land acquisition. As per contract, land should be handed over to the government within six months. But to date land has not been handed over. Some other partner might go for

arbitration or claim that the government of Jharkhand was supposed to hand over land and all... but no, in our case, we won't go by this. We will try to accommodate. And later the government of Jharkhand will pay us the annuity payment. And whatever the obligations of govt of Jharkhand is, we will help them sort it out. Concession is a part of govt of Jharkhand. Our aim is to complete the project with the help of govt and by helping the govt of Jharkhand. So, it is that type of approach where the problem doesn't arise.

### **Interview 08A- August 2011, Jharkhand, India**

Informal talk with AVP, IL&FS

At IL&FS office (office of Saxena), Ranchi

26 August 2010, in the conference room

He introduced himself as he had spoken to me over the phone. He is the project manager from IL&FS on the state highway projects. He is originally from Uttarakhand and has been there for more than two years. He has started working on PPP projects from the scratch in Jharkhand. This conversation was an introductory talk with a light informal tone.

1. How do you feel about having PPP in Jharkhand? Is it politically correct?

PPP is the only option GoJ has got. They don't have the capacity to invest such huge amounts in infrastructure. In the case of PPP, they don't have to spend a penny for the maintenance of the road for the whole concession period. They will pay an annuity but in instalments, and in 15 years. In addition, they will get a world class facility back after the end of the concession period.

2. But the govt has to pay the annuity payment, which is a lot?

Yeah. But then they would have had to pay it in one or two years with the normal method. And everything comes at a cost and we are investing that amount in one instalment.

3. How difficult is it to operate in a state like Jharkhand that is under president's rule?

Tough. I have seen seven governments changing in two years. Every time new government comes and you have to start explaining the project, securing all

permission afresh. These are political uncertainties and instabilities that we act under. For NHAI project, the project will be still valid and under the broader policy framework, NHAI will still pay the annuity amount. But you have to get permission from land acquisition, forest, mining etc. if the government and the people are changing, senior officers randomly being transferred; it is difficult to cope with the situation.

4. Then why is private sector investing in such regions at all?

Business opportunity. It's a big business and new avenue (?) for private sector actors.

5. My thoughts

I think he is one of potential asset for me. He knows all about PPP and problems and probably solutions (?) related to this in Jharkhand. He is willing to talk to me next week (1-2 hours) and discuss his projects. I think it would be good opportunity. He also mentioned I can think of selecting state highway projects. In that case, I will have to get permission from state govt. He will help me to secure such permission. Since he has seen the loopholes of the state in terms of attracting PPP, he will be an asset.

### **Interviews 09 & 10- September 2010, Jharkhand, India**

Conversation with team leaders from the concessionaire side for Ranchi Ring Road project

1. Conceptualization of the project

Ranchi Ring Road was planned to bypass the regional traffic. Due to formation of a new state capital and increasing car ownership, Ranchi has become much congested. The regional traffic was also suffering due to intra-city traffic chaos. If commercial trucks are going to Jamshedpur from Gumla, they have to be stuck in the road traffic of Ranchi. Now, after the ring road is made, they can easily move. We are also trying to make less number of intersections and conflict areas. Also, in the intra city traffic there are one ways during peak hour. With the ring road, regional traffic will not have to face that. NH-23, 33 and 75 are passing through Ranchi. This ring road is a bypass for all these highways. [The state government has not been very clever in planning. They would have made it national highway and then demanded funding from the central government. It is actually bypass of national highway]. We used to

have traffic congestion from 9am-9pm. Now this congestion will be over. There are too many vehicles like luggage, cargo, standard, who would not have to be stuck. Since we are getting rid of congestion, vehicle movement will be faster, we can travel in less time, and it will contribute towards economic development.

Initially there was plan of B[...] B[...], CM of Jharkhand for greater Ranchi. And ring road was planned according to that. Later on, the plan of greater Ranchi changed. Location of greater Ranchi also changed with change of government. But still the initial Ring Road is coming up with mild modification.

[There were 4-5 options for ring road. The final one was chosen from them. Those alternative plans could not be accessed, not because of confidentiality but because data was lost. I will approach the dept of urban development for them again? For the time being, I don't have any overall development plan in pictorial view with me].

So, the main objective behind planning the road was first to decongest the existing road from existing traffic and facilitate smooth flow, and then to provide road for increasing traffic.

While USA has 57 lakhs km road, we have 35 lakhs. It is our target to increase road length to that figure? Increase from 200-250km to 500 km.

Our aim is not only to provide length road but also to quality road. We have maximum road accidents in the world. We are providing wide road for high-speed traffic, so that it becomes easier for them to change route safely.

The concessionaire is giving fixed rate contract. It means that the change in price of petroleum will not have any effect on the contract rate. As opposed to fixed rate contract, item rate contract might have additional items.

## 2. Your responsibilities in the project regarding clearances

Generally government is supposed to take environmental clearance and utility shifting responsibilities on them. EPC contractor has to acquire clearances like quarry permit, permission from pollution control board for equipments, for use of explosives, for using irrigation water on their own from the government.

However, although it is the responsibility of the government to provide all these clearances, concessionaires run everywhere to expedite the process. It is important to follow up with the government departments to get things done timely. Sometimes

they visit together as the government employees impart more importance to the word of another government employee. For the same work, if some private sector party has to go to the government 50 times, the same work will be done if the government employee visits 10 times. But you need to push them to do so. In government sector, part of same work is done by too many people, and hence, it gets delayed. In private sector, the same person is doing the whole job, and hence, it is faster. If you do not follow up, it will take much longer. We are doing all the paper works for them, we are constantly asking them what else we need to submit, but still we haven't got the forest clearance even after one year.

It would have been very good if various government departments were proactive and approached us to know what clearances we need for them. In reality, it doesn't happen. Government has its own mechanism. We have to run everywhere to secure such permission, sometimes coordinating with different government departments; with government officials.

However, once the road is built, it will bring revolution to the state of Jharkhand. Our aim is to complete the project within time and budget, and also, to provide good roads.

One of the informant from government side commented: 'Communication is civilization. When you are born, you are on road, when you die, you will be on road. When you develop road, settlements will come, development will come its way. Look at America, they have such good road structure. We want to be there.'

We are building our own roads, with the thing in mind that we have to maintain it for next approx 30 years. Then again, these journalists are telling us how to do it. They want to teach us. This is what we have always been doing. Dainik Bhashkar's report published something against concessionaire. They then came to meet the director to negotiate something. There is something wrong in the whole system. [If the PPP model distributes risks properly, then why would people not have confidence in them? Local newspaper plays an important role in making up the minds of the general public; and hence, they are dishonestly trying to use this power to generate money for themselves?]

**Interview 11- August 2011, Jharkhand, India**

## Interview with Deputy Secretary of RCD, GoJ

### 1. Prioritization of road development in the context of urban development

Jharkhand has a hilly terrain. North eastern part of Jharkhand till recently did not even have rail connection. They have recently started a rail connection between Deoghar-Dumka which will be inaugurated on 15<sup>th</sup> July. This is the first rail connection in that region. Hence, the region was very much dependent on road. The only sort of mode for common was road to travel across. There was no other option on the northern part. Road was important for connectivity, administration and technical development.

### 2. National-state-other roads

National highways are property of GoI road network. There is approximately 1850km of national highways. 190km of NH-2. This is part of Delhi-Calcutta road, it's 4 lane and part of golden quadrilateral. 333km of NH33 is now executed by NHAI for four laning.

State highways are second category. They are of same nature and ROW as of NH.

Rural roads were not a structural component of road network till recently. Structural component means those roads were one-way. They could start from anywhere inside and terminate at NH or SH. Recently PMRGSY under GoI has upgraded them to two way roads. So that any outside traffic can go inside and vehicles can directly come outside. Otherwise heavy vehicles used to terminate at some point on the main highways. According to the nomenclature of serviceability, national highways are known as primary network, state highway and major district roads are known as secondary network and village and rural roads are known as tertiary network. They are also prioritized this way.

### 3. Why PPP?

Past roads used to be a by-product of something else like industrial use, for employing labour. It used to be employment based and labour based. Things have changed recently. Roads work as administrative network; and also, economic development, as we say, roads that build nation. Now we demand for highly mechanized type of mobility, we do have modern cars and we need better road for them. It has to be compatible to the vehicle. Now it has become need to use good quality of road. Such road construction is cost intensive. However, we do have

limited resources. We also need to look into social sectors. We need upfront investment which cannot come from public. So, there are three reasons: upfront investment, technical expertise (no training in public sector, hands on experience, competition), and risk distribution. Now we are buying kms of maintained road. The focus is more on governance. Get good roads. Risk is with the person best suited to handle.

#### 4. Risk distribution and value for money

PPP roads based on economics. Government is not supposed to do business. They are not supposed to think of profit and loss. Previously the question was about serviceability and communicability. We didn't use to think of at what cost. Now the question is of mobility. Private players are competitive and thinking of economics. Vehicle operating cost; time saved is money generated. Saving fuel. In PPP, if we close one lane, we have to pay. Hence, there is more accountability.

#### 5. Investment friendly environment

This is government's duty to deliver fearless environment as a whole. We are doing this on behalf of RCD. We have to give possession of site to private sector. We act on info provided by private sector; write to concerned authority, interact with them. Such actions involve work in limited area, Traffic is not stopped, take all permissions, land acquisition, they employ local people, hence, job generation, inclusive planning; they don't carry out development activity as a third party. They work on nomination, competition. We don't advertise projects. Since this is on existing corridor, we don't need to do. Bypasses are considered part of existing corridor.

9. Developing concessionaire agreement: in our case, we have adopted the Model Concessionaire Agreement of NHAI in terms of its financial and legal aspects. Why do we need to change? The cost of appointing IC is generally shared between NHAI and concessionaire. In our case, GoJ isn't sharing the cost. We have passed on this to the private party.

In our case, JARDCL is a joint venture. Private party is also partner. We have made an arrangement. The concessionaire agreement says what are the obligations? Due to the close distance working way, government and private partner both have adopted others' working pattern.



Although it's a joint venture, we do have shared responsibility. Certain jobs are split though mainly depending on the authority.

10. Why certain alignment was chosen over other?

There were mainly three factors: cost aspect, land acquisition/ displacement (we generally tend to avoid densely populated areas or religious structures), and in this particular case priority was given to growth of the city. The city has to grow. Priority was given to maximizing fringe development.

11. Story about how the project was conceptualized:

This region was a part of state of Bihar. Being a hill station, this region did not have too many options to commute. There were only 6-7 radial roads converging at Ranchi. 15-20 years back, this city was considered as second city of Bihar. It wasn't crowded and hence there was no requirement for bigger network.

In late 90s' we thought if we have a ring road, the city would grow. This was during 1998-99. In 2000, GoJ was formed and this region came out of Bihar. Since the region was on political turmoil, development process took a back seat.

After the situation was controlled, the first thing came up in the development process was this project. MSV international was appointed to prepare the DPR in 2002. The report was finalized in 2003-2004. The original cost of the project was derived as 600-700 crores. However, GoJ had a budget of 120 crores only. Hence, it was obvious that government cannot do the project on its own. GoJ tried to convince the central government that these are bypassing NHs and hence NHAI can pick up these projects. Somehow it didn't materialize. Later on NHAI mentioned that even if they pick up the project, they would develop only a segment of this. Hence, it won't be a ring road. Since this ring road will contribute towards development of Ranchi, the capital of Jharkhand, it is the responsibility of state government. Hence, this project was divided in three segments and three different models were chosen for development. There is no connection between them. We still plan to have greater Ranchi surrounding section VII.

Future of road:

The NH bypass is going to be a toll road. Also, GoJ alignment will be a toll road. Since these are fresh alignments, from the very beginning these will be introduced as toll roads so that users don't feel like that they were using this road free of cost

before. Annuity model doesn't mean government cannot charge toll. Where the government will pay that annuity from? It's just that private sector is not collecting the toll themselves. Such road alignments are designed on the basis of alternative analysis, toll is charged taken from money saved.

## **Interview 12- September 2010, Kolkata, India**

Initial talk with concessionaire director, SVB:

Partnership formation stage:

1. Who are core and peripheral actors/organizations?
2. How is a partnership formed? Is partnership formed among organizations/people? Generally actors are changed right after the formation of partnership?
3. What are the external factors that influence private sector's investment decision? What are the factors that influence public sector's bidding criteria and planning of a project?
4. How is a primary consultant selected?
5. What are the renegotiation issues? Who finally dominates in the concession agreement? How does it vary across regions?

Financial closure stage:

1. Who are active members or organizations at this stage? Who are peripheral?
2. What are external factors? Why do some projects not reach the financial closure stage? What happens then to those projects?
3. How does the face-to-face interaction between partners improve the relation of partners at this stage?
4. When are the people or actors in the partnership change? What is the hand over system?
5. Power relation, disciplinary background

Project implementation stage:

1. What are the external organizations that influence successful implementation of project? How does the whole system work?
2. How would you describe the partnership arrangement and relation during execution?

3. How is IC introduced and how do they fit in the whole arrangement?
4. Can you please describe their interaction pattern and frequency? Why would you need face-to-face interaction and how does it help to improve the relation?
5. How do the partners collaborate? Do they take decision on their own or in collaboration? Does the decision making pattern influence the project outcome, especially in terms of efficiency?
6. What are the barriers or enabling factors for cooperation?
7. Power relation, disciplinary background

Operation and maintenance stage:

1. Who are the main actors? Are the same organizations involved? Are the same actors involved?
2. How does the whole system work?
3. Role of IC
4. Partnership relation
5. Interaction pattern and frequency and purpose
6. Cooperation or split of responsibility
7. Power relation, disciplinary background

Meeting with the director, Second Vivekananda Bridge Tollway Ltd. At his office on 11 September 2010, 3:00pm–4:50 pm.

This project was completed in 2007 and in operation and maintenance stage now. The shareholders and other people in the company now are new to this project and their involvement is purely for their business. They are not at all aware about what happened in the construction stage. These people are pure businessman and they have no connection with prior people. It was a big consortium with multiple companies. Now they have moved to different places and now it's a new set of arrangements.

There are certain qualities that partners should have to form a successful partnership for such projects. Since we have now gone through the whole process, these facts are quite visible. This project was one of the initial projects with BOT in India like Jaipur-Kissan expressway. That time we didn't have a model concession agreement like today. Hence the concession agreement was quite customized for the project. It was one of the projects from which NHAI learnt the process. Now what we see as MCA is an outcome of the learning process.

The main requirement from an entrepreneur to be involved in a PPP project is that the person should be purely developer like real estate developers rather than construction contractor. They should be able to make a business plan in terms of how to put their efforts and mobilize their resources. The entrepreneur should be able to analyze the risk elements of a project in the pre-development stage. They should have knowledge about certain solutions for the anticipated risks, should be aware about risk handling ways, and should know how to tackle risks. Otherwise, if they fail to figure out such solutions, then the project would not be viable.

To date, road user fee is a matter of debate in India. Government introduced a new policy in 2008. It was different before that. These initial above-mentioned projects started being operated in 2005-06. With the prior notification of user fee, all the projects were partially (sometimes hardly) viable. NHAI made these projects hardly viable with prior user fee notification.

Government has issued viability gap funding for economically non-feasible projects. This VGF was covering up to 40% project cost. However, government was overstressed with even this 40% project cost. It was too big amount for them to invest. In the new notification as started from 2008, they have increased the user fee. However, there are lots of ifs and buts. They have introduced appreciably high toll in the 2008 notification. It is doubtful whether such huge user fee is acceptable in the Indian context of transportation system. Although the rule came in 2008, two years ago, they have hardly been applied. The government started using them in two-three stretches in Maharashtra and Gujrat region. This high user fee has experienced very high public objection. Especially the states in the eastern zone like Orissa have an adverse attitude towards user fee. However, India has started accepting this concept of user fee now in last 6 years (2004-10). I would say 80% of transportation network in India has accepted this concept of toll.

We have to do traffic study to foresee whether a project is viable. There are surveys like willingness to toll. There are traffic studies to anticipate the risks associated with the project. There is a tendency that even the most accurate traffic study can be upset. Roughly I would say that 20% of predictions match with the reality whereas still 80% of studies don't match. In major cases, there are overestimations; sometimes there are underestimations as well. The point is highways in India are still underdeveloped and we are not sure what would be the pattern when it will be developed. In most of the

studies, we go for historical record of traffic growth while predicting our future. However, this historical data are unreliable. For example, when we anticipate that quality improvement of highway would attract traffic, passengers find out an alternative way while the road is being improved. And then as a result, sometimes the usage of the road even goes below as people start using the alternative road. It is even more difficult to predict future usage for Greenfields.

We need to do origin destination study. We have seen that only 10-15% of users go from the origin to destination. Otherwise they either start their trip from midway or they terminate at midway. Hence, if we want to find out a shorter route (30 km instead of 50km), it attracts a very small portion of traffic. These are very critical areas. And those studies are done by private sector developers before they bid for a project.

So, it was the demand risk. Now we also have construction risk. There are negotiations between government and concessionaire. It is written that ... 'if they finalize the project in my favour ....' ... *it depends on the development type* ... Unless the project is fully realized, they can't start tolling. Sometimes partial tolling is allowed though if mentioned in contract.

Generally the concessionaires are issued completion certificate. Then only they can start tolling. It is the matter of construction management and accurate forecasting of project completion. The IEs generally do the quality checking of the project. One of the project elements is also auditing. Sometimes there are dispute stages like internal quality issues. Then they would not be granted completion certificate. Again, it's a matter of risk management. There is a project management team for each project. They don't own the project or invest in a project. They advise investors, contractors administrators and concessionaires on how to do the whole project management. There are series of obligations for concessionaire, public sector and IE.

It is difficult to grip the all the terms and conditions written in the contract until and unless you do one or two such projects, if you do not have exposure. It looks like unmanageable. While you start working, it is not that difficult. You have to read the whole thing in advance, and then, make plan accordingly. Here you have to make use of the PMC. The whole idea is you have to squeeze the time of construction. If you can, then you will have longer time for revenue generation.

For some projects, even government gives the VGF. But it's not in a form of equity participation. Government has legal complications that way. It comes in the form of pure grant. Government issues this grant as their social contribution. The rest comes in commercial terms.

So there are toll risk, traffic risk, construction risk. Then there are issues with completion certificate. Being involved in a project, learning made the process easier and manageable. PPP has become very popular in highway, power and airport sector in India. This model is delivering better-quality services.

In airport projects, they are making 5 to 10 years prediction. Its difficult in highway sector to predict for 15 yrs and predetermine whether we need a 4 or 6 ways lane after 15 years.

Some private sector developers are even offering negative grant. L&T has paid the government upfront for a project in Ahmedabad – Baroda area. There were some issues during the economic recession, global slowdown. These projects are based on speculation and hence these projects suffer due to these global situations. Their margin of profits goes down.

*[bidding calculation, debt services, upfront payment, bank loan ...]*

Now let's talk about qualification of member entrepreneurs. They have to be construction specialist, they can be in investment/promoting/infrastructure building experts. They also might be specialist like highway, bridge design consultants. It is very tricky to choose group members. Hire anybody, but proper coordination and timely implementation are important. It is important that people who are working have equity contribution towards the project. It is important to have a sense of partnership. Otherwise it's difficult to work together. We haven't picked up any partner from the market. We have negotiated it with our members. Each and every contractor has a shareholding with the company. It is permissible under BOT. I have picked up each contractor, design consultant and directly negotiated with them. There is no problem with that. This is the way partners were selected. There was only one organization that was selected from market. It was outsourced to a company from San Diego by a partner, digital specialized technology, San Diego.

L&T had 33% stake. Construction contractors had 470 crores equity. The total cost for O&M part was 30 crores, which contract was given to Road user. It wasn't an outsider's

firm. Two companies, IGM and XXX had 30% and 70% share. They were members and formed a company together for O&M. This whole process was transparent. It was permissible.

When a partnership is formed, partners have to make an initial financial plan and have to freeze the contract. The entire financial plan for EPC, OM, PM with final amounts and debt, equity distribution has to be frozen before financial closure. Equity for the project was 127 crores, NHAI paid 120 crores, and debt was 400 crores. While the initial cost of the project was 648 crores, it actually came up as 676 crores. Hence, there was overrun of 29 crores, which was paid by the promoters. This project was a single bid project. Hence, there was renegotiation on financial analysis and terms and conditions for the concession agreement. Generally the time allotted for the project is 180 days. However, it is completely the entrepreneur's interest to squeeze the days for the same in order to pre-pone the appointed dates.

There are also cases of failure. There are certain public interests that government is safeguarding. There are penalty clauses in the concession agreement. They do quality control of the asset. If construction is not completed on time, or if the quality doesn't match the schedule, then completion certificate is also delayed. Sometimes government grants the commissioning of project without tolling right on public demand. Since the project is complete, public demands to start using the route; however, as the quality is not satisfactory, government doesn't issue the completion certificate, and doesn't permit concessionaire to collect the grant.

Regarding land acquisition, government still fails on compliance. According to the concession agreement, they are still bound to handover only 80% of land on the appointed date. The safeguard is that if they fail to do this concessionaire can charge them escalation cost. However, there is still some stagnancy in this regard. The risk factor is land might still not be available on the date. Government says that they are handing over the 80% critical land. Actually there is no rigid definition for critical land. We consider this balance 20% land as most critical. In practice, we have been handed over only 50-60% land. By terms and conditions, they would hand over the balance 20% land in 180 days, which is 6 months. By chance, if the foundation of your structure lies in that 20% area, then you cannot start working on the structure at all for next 6 months. It is a drawback in Indian PPP. This 20% of land might cause hindrance to project, and might lead to project failure.

Also, since the road alignment is already preliminarily by external consultant with a team from government depending on availability of land, road alignment change cannot be a part of renegotiation. Also, as we have seen, bidders still get the cost wrong by 50%. For example, if the government evaluates a project cost as 1,000 crores, it will be actually 1,500 crores. The average variation in project cost is 1.3-1.5 times. Hence, there is an ongoing debate in the field on why the cost of funding would vary in two cases where highway consultants work as advisers in both the cases? It looks like the perception of vendor is different in those cases from the theoretical point of view.

We have seen that a project consultant and a builder evaluate the same projects in two ways. Generally the builders' value is always 25-30% more than consultants. It might be because of the risk for project consultant is less, they don't have to pay anything. But it is a matter of life or death for builders.

There has been change in the government sector since PPP has been introduced. There are some problem areas in the contract. There are obligations for NHAI. Hence, if they don't fulfil those conditions then government has to pay penalty. Whenever NHAI initially neglected those areas, finally they had to pay compensation. There was compliance from the private sectors' side, they sue cases against NHAI and they have been awarded. Public sector is slowly learning the level of dealing with private sector. I wouldn't say there is perfect harmony though. Still because of the legal provision in PPP, the public sector has improved a lot. Although they would still take more time than private sector, still it is much faster than what used to be before. It is a big achievement. Public sector did not use to accept emails or any other electronic material as official. But now to work faster, they have started using this. They have website, their own email domains, email IDs, they check emails on regular basis. This is a breakthrough. All these changes took place due to PPP. Their attitude changed, they have become commercially oriented.

There are some clearances that government secure for us, some that we have to do. Now NHAI has to secure the environmental clearance even before bidding for a project. Hence, it is not our responsibility. If the highway is crossing any railway line or any other highway or route of mode of transportation, then there is split of responsibility. For example, for railway authority, we had to secure the approval and also had to pay the fee. In this case, we also had to take permission from river authority and port authority. These clearances were arranged by NHAI.



In such partnerships, NHAI, concessionaire and IEs were involved. There was complete audit of the whole thing. As of referring from the industry side, I would say government responds. Sometimes they don't respond to queries of their appointed contractors. But it is different in PPP. If we send a notice in PPP of some pending job, they are bound to respond with the respect of legal risk. As we do have deliverables, they also do have. Sometimes they become non-responsive for reasons like transfers of officers. This is rare and is beyond control of us.

I am involved in this project since 1995, when the project was conceptualized. The current project manager got involved in 2004. It is difficult to predict future correctly. There were four companies for traffic risk management. Everyone's prediction failed. You need specific skills to be involved in PPP. There is more risk. There are differences between two systems. It is difficult to make everyone participate if they don't have the partnership. Otherwise, the perception doesn't come automatically.

In EPC, we construct, we do the job and leave. We are not bothered about what happens later on. If you have ownership, attitude changes. So you are always worried. You have to ensure the life of the asset for next 25-30 years whatever is the concession period. Hence, good assets are coming up through PPP.

### **Interview 12A- August 2011, Jharkhand, India**

Discussion continues with the director

Government formulates the contractual agreement in their favour. So, they don't need to go for lawsuits. They simply don't approve payment if things are not in their favour. Private sector entrepreneurs have to opt for lawsuit if conditions are not met. However, entrepreneurs don't prefer to do so. This is not only because of they don't want to spoil the relation, also because of the legal system in our country is lingering. From the public sector, they have lawyers who can work on the same case year after year. But from the private sector side, the entrepreneur has to appoint and keep on paying fee to the legal adviser year after year for a single case. While their money is already at stake, they wouldn't want to waste more money for the elongated law process.

The public sector and private sector still don't play on equal platform in our country. Government sector still knows that they can get rid of it. It is different in more developed countries like USA, UK. The public sector takes the lawsuits seriously as

there are more tools to make the public sector accountable. Here they can get rid of their own responsibilities.

We didn't go for any claim as 3 of 4 condition precedents were met. There are lots of external risks especially in toll projects. Even in annuity project, the main risk is construction risk. In regions like Bihar and Jharkhand, even that can become a headache.

### **Interview 13- September 2010, Jharkhand, India**

Semi-structured interview with the manager of the Project Management Team on 15<sup>th</sup> September 2010 morning 11-11.45am.

Since it was one of the initial BOT projects, not only in the eastern region, but also in whole India, it received a grant from NHAI. Generally it is the responsibility of the concessionaire to arrange for finances, but they are not always willing to invest the whole amount. So, here after negotiation, we asked NHAI for grant. There are investors, who sometimes borrow money from lender, to invest in the project. Our lenders were SBI and 14 other banks. There were some international investors as well from USA. We will hand over the asset to NHAI after 27 years. We were awarded this project in 2004 and we were commissioned in July 2007. The construction period was of 36 months. It was slightly delayed and we got extension of 2 months. I would say it is a successful project as 2 months is nothing for a project of 36 months.

In terms of expectation of return from a project, it is not fulfilled yet. There are too many risks that the concessionaire has to take in projects like this. There are risks that the investor and the client have to share. These were fixed price contract. Although we call this PPP, it follows the EPC model only. The only thing is the concessionaire is contracting out. EPC includes both design and construction. So, if the project doesn't follow tight schedule, then there will be time extension, and hence, cost overrun. Since it is a fixed price contract, there will be adjustments from the investor's side. Hence, it is our risk.

Although the concessionaire and client are main partners, the concession agreement extends beyond it. There are other actors as state government. It is not a single agreement between client and investor. There are a lot of other parties. There is something called state support agreement, which is on cooperation required from the

state government. There is independent engineer, who is appointed from the NHAI side. Investors also deploy another consultant, called Project Management Team (PMC) as a technical team to oversee whether work is being done as per programme, within cost and with good quality control. They are basically to oversee the covering of the programme. Overall, it was evaluated as a successful one. This is why we also received an international award from an USA based company.

Land acquirement is the responsibility of the client. Especially in case of Greenfield projects, state government has to procure land.

There are some clauses in the concession agreement called conditions precedent that both the client and concessionaire agree jointly. With the support of central government, state government is supposed to fulfil such conditions. In our case, some of such conditions were not fulfilled and the problem is not solved yet. We are still suffering for that. If you take that bridge from the other side and come to Calcutta, then the stretch that connects the flyover with BT Road suffers a lot due to traffic chaos. The junction is not well designed and there is always a traffic chaos and jam that imparts to long waiting for cars taking that route. In the conditions precedents, it was agreed that the state government, PWD, will build a flyover for the traffic coming to Calcutta so that vehicles coming from Second Vivekananda bridge to Calcutta, can be bypassed through the proposed flyover. It has not been developed yet. We are suffering due to this because we are losing users of our road. When people see that they have to wait long at the junction longer than they saved time by taking our new road, they are not taking our road anymore. Instead they will take NH34 and Kalyani bridge. Hence, we are losing our customers and we are not getting the return from the project as expected.

Another example would be Belgharia expressway towards the airport side. It was also there in our conditions precedent. It was also supposed to be ready when we finish our project. It was delayed. Somehow, they managed to complete the project and opened it to the public. However, the road condition is very bad now. PWD finally handed over the stretch to NHAI as now it is a part of NH2. The condition of the road for the stretch of 8 km that connects our bridge with Belgharia flyover is very bad. It's shabby and there are holes. Passengers are unwilling to take that road just to avoid that 8 km stretch. And hence, we are losing our forecasted traffic. That stretch is now managed by NHAI, but since they don't have good enough infrastructure to take care of such things, it is not maintained properly.

There were also some issues regarding land availability during construction. Contractors are supposed to get 100% encroachment free land before they start construction. But it didn't happen in practice. And we couldn't say that we wouldn't start construction until and unless we get such lands, because at the end of the day, it is our risk, we will lose our time. So, during construction, somehow the contractor managed to move people from there to some other place temporarily. They freed the land and took possession for construction. It is difficult to move people from there. Although the land belongs to NHAI, since those people were living there for 15 years or so, they had built up a sense of community and it is difficult to rehabilitate them. Although the contractors moved them during construction, they came back to the place later on after the construction is over. This chunk of land was not inside our construction site. It was just adjacent to the site. Land in the buffer area also belongs to NHAI, the ROW is 35-40 km. But still, the point is that it is not safe for the community to be there during construction and also after construction. Generally highway is supposed to have fencing along it, so that, no one can enter walking or cross the road as a pedestrian. But we don't have any fencing so far. And there are communities living along the road. Hence, it is risky for them. It also slows down the traffic. And hence people avoid using such roads. And we lose users and it affects our return. You know how things are in Bengal! However, now they are taking care of such issues. With the new plan of 6 laning of 4 lane Durgapore-Kolkata highway, things will be better. Such issues will be taken care of there. In our case, there was one example when it was a small chunk of encroached land that we had to vacate. We arranged everything and NHAI officials also came down while vacating the land.

The other important factor that influenced the investment decision was the planning of Tata's factory in Singur and the Dankuni township. It was expected that with such large scale planning projects we will have more users of our new road and people will take that route. However, due to political disturbances, these projects didn't happen. Hence, while we planned to invest in this project, these things affected our decision. But it was beyond our control. Our road would have received much more users if those projects were successfully implemented.

Also, the national growth rate is 7-8%. Our forecasting considered that 7-8% growth in traffic. But the scale is much lower for West Bengal. Hence, we have suffered for that lower growth rate as well.

Our relation with NHAI officials was good. We used to meet every month for a regular meeting on progress of projects. Also, we used to have quarterly board meeting for the project. There used to be lender meeting as well. Since they had invested in the project, they were interested in knowing the progress of the project. SBI and all 14 banks used to meet to oversee whether the project is progressing as per plan. Lenders have their own engineers deployed by bank. Lender engineers (LE) used to visit the site and supervise the overall growth of the project once in every three months. Also, the concessionaire has to give presentation in front of the lenders and their engineers in that once in three months meeting. Overall, we received good support from the state government.

#### **Interview 14- August 2011, Kolkata, India**

Conversation with one of the key informants from Second Vivekananda Bridge

I met him in his office on 9 August 2011 in Saltlake. He is a man in his senior years with a small office. He is appointed by the company of Louis Berger and Ayesa international. They are the IC for operation and maintenance and has been appointed in 2010. ICs during O&M stage are reappointed in every three years. In summary, their responsibility is to oversee whether traffic is interrupted on the bridge and why, whether it is concessionaires' fault and removing any barrier to traffic movement on the road. Concessionaire has to take approval for lane closure from IC. IC also assures that concessionaire is taking care of complaints from public. They also look after cases of accidents/ reason/ whether there was any design fault/ whether the incident was due to any poor maintenance. After accident how fast the lane is resumed to normal traffic movement etc. Although payment is done by both NHAI and concessionaire on 50-50 basis, as per contract between NHAI and IC, IC is closer to NHAI than concessionaire.

As per the concessionaire agreement, there are some defects. IC workforce is very small in relation to the workload. There is one team leader and three engineers. Although by contract they are not responsible to oversee day-to-day work, with the designated obligations, they have to supervise day-to-day work. Otherwise IC will be in trouble. They get raw treatment from both sides.

Secondly, there are many activities that are done by concessionaire in the absence of IC. In a cash contract, supervision is done at every stage. No onward step is possible unless it is certified by the engineer. For example, in concreting, it is done at every 200mm

layer. In a cash contract, it is almost 100% complied with, as the engineer-in-charge would not let the work progress otherwise. In case of PPP, concessionaire is not under such obligation. ICs visit the site voluntarily. They are supposed to visit the site once in a month. It is neither possible for them to monitor the work on a day-to-day basis, nor in their remit of work. Hence, the quality of work is turned down. The main reason is poor quality of engineers. These concessionaire companies have CEOs, COOs, VCs who are big names. They are supposed to know the job. Unfortunately they don't. At present there is no system in government to properly judge the manpower in respect to qualification, efficiency and culture about quality maintenance. Moreover, in the private sector companies, manpower is constantly moving. Once they finish a project, they move on to a new company. Hence, they don't have any accountability. There is nothing like a consumer forum to register complaints against engineers. I have heard people so many times saying, '*Aapka kya jata hai?*' [How does it matter to you?]. Even NHAI has the manpower problem. There is one single senior engineer taking care of so many kms of road. The whole thing NHAI is doing with PPP model is an eyewash, such jobs are quality-wise horrible.

For example, L&T worked as EPC contractor for the project. There are many things that have failed as per specification. Now L&T has worked and left. IC is now pointing out these things at the O&M stage. From where the concessionaire will get money to redo this? There is no allocated fund. There are many faults which gives rise to risky, serious, dangerous situation. It should be made compulsory in the concessionaire agreement for concessionaire to apply his own quality control team or professional consultant who will report to both concessionaire and IC.

Although the concessionaire is supposed to maintain the project, life of bridge is 100 years whereas the concession period is only 25 years. Hence, they will construct something that will work well for 20-25 years, and then government has to build the whole thing again right after that. For instance, if that 200mm layers are not compacted properly, then the road will have depression in sometime and hence the road will have undulation.

There is a layer of GSB, Granular sub-base, which remains under the bituminous layer. This is supposed to have crushed stone. There are construction jobs going on where they use mainly sand with some stones to build that layer. You need day-to-day inspection, supervision and invigilation to control the quality of work at that level.

If curing during concreting is not done properly, then the concrete attains only 40% strength. IC has little scope to look into those details and nil power to compel the contractor to follow the proper method.

The second difficulty in the agreement is regarding the change of scope. For instance, the consultant appointed by government does some calculation in DPR and recommends 160 mm thick DBM layer. Then the concessionaire comes and says there is no need for 160mm thick layer, 130mm would do. The concessionaire saves a lot of money by doing so. IC has to approve it. However, IC doesn't have the time and knowledge to go into so much detail of calculation to verify this. Again, there is very little manpower on the part of IC with respect to the workload. Thousands of drawings are coming everyday, they have to sign and stamp these. Although the stamping means it has been verified, it practically cannot be scrutinized in detail. IC also has to check all concrete member drawings. The contractors save crores of rupees by compromising on quality of construction. IC inspection in the PPP model is a farce. There shouldn't be any provision for negative change of scope. For instance, if a layer is being reduced from 800mm to 600mm, this money should be deducted from the contract as well.

Concessionaires attempt to reduce the overall volume of the work after they are awarded the contract. They can do whatever they want as they are investing so much of money. '*Matha kine nieche*' [They have bought our head].

Now I can tell you certain things that we are coming across during maintenance. During maintenance, it is difficult to work as per IRC specification. There are small jobs for which the concessionaire will remain reluctant to bring big machines. Hence, they tend to do manual construction. And so quality is not maintained.

There are also previous construction defects that we are coming across now. Work is found not satisfactory. But it is difficult for IC to make concessionaire bound to redo the work.

For the bridge, cables are pre-stressed one by one. These are very crucial job, but not done under senior-level supervision. If this is not done properly, cables might be under-stressed or overstressed. Both are equally dangerous. And until certain time period is passed by, no one would be able to detect that fault. Now even the contractor gets to detect the fault during construction, they will tend to compensate this in some way as redoing would involve huge cost. Hence, they will avoid the process.

We have something called riding quality failure for the bridge now. This is to check the unevenness of the bridge. There are count of bumps count per km. Up to certain number of bumps are allowed. The road is undulation. Because of the softness of the road, the road is depressed. We do have a scale of measurement as good/ satisfactory/ poor. We have found out poor in this case.

It is mentioned in the minutes of meeting. There is commitment from the concessionaire to rectify this. They were told to redo this in January of this year. They were supposed to record the whole stretch and submit report. Now this would be like writing a suicide letter. They will probably manipulate the results. However, they keep on saying give us time and we will do this. They haven't submitted any report yet.

This bridge has used a technology for the first time in India. This technology is less costly and easy to maintain. However, there are some in-born defects of the system. IC should get the report from the senior engineer who would be accountable. There are some fundamental problems. Nowadays there are Ready Mix Concrete (RMC) labs. Quality of concrete is not checked there at the plant by an inspector of concessionaire. Hence, what is produced is uncontrolled cement.

The technique that this bridge has used, is new in the country. This is called extra dosed pre-stressed cable suspension bridge. Someone from the government should have checked the design. However, as this has never been used in India, government officials did not have the knowledge or expertise to do this.

There is a big question about accountability of such projects. If you want to discuss stakeholders, NHAI and concessionaire are stakeholders; and also the public is stakeholder. Now how does it maintain accountability to public? It has to be done through the government sector. Since there is also manpower problem in NHAI, such accountability is questionable.

#### **Interview 15- August 2011, Delhi, India**

This interview was conducted at India Habitat Center, CII office at Delhi. The interviewee is the Director of CII. CII is a peripheral organization that has done a lot to promote PPP in India. And he has been one of the key persons in this activity. Prior appointment was taken with him through his secretary. And he was informed that this conversation is being recorded.



Interviewer (I): How is CII involved with PPP?

BK: CII is the industrial association and we have the national council of CII, which is the elective body of industries and we have around 8,000-8,500 direct members. And then we have our 80,000-90,000 direct members. We have some small industries also, and they are the members of CII. And then, we have for each sector we have a national committee. And that committee is a body having representation from industry, experts, academia, institutions and also sometimes government. And we have a national committee on infrastructure, which is headed by Mr. Sanjay Reddy. He is the vice chairman of GBK. And a big player in the infrastructure sector. They are majorly into power and airport sector. And also they have highway projects on PPP basis. And it has a membership on many key industries, leaders. And this body works on various issues. So, CII's involvement has been quite a lot very closely with the government, on policies, ensuring the policy is conducive to attracting private sector in ports, airports, highways, power sector, also now we looking at urban infrastructure, which is a new thing. Also, you wouldn't see much industrialists being interested investing in urban infrastructure on PPP basis. But if you look at other sectors like airports, sea ports, it's a very successful story. Roads and highways you will see a huge interest coming on PPP and staying. So, this is how CII is involved in infrastructure. And particularly on PPP. Tell me what exactly then I can [...]

I: when you are promoting PPP, how do you think the private sector will be interested in investing? Is there any spillover between projects? Which type of companies would be interested to invest in a highway?

BK: If you look at PPP in highways, you will see most of the companies that have been interested in investing on highways are core construction companies. They were already on highways and working on building and constructing highways on cash contract basis. So, government was the sole investor to work on highways. And these companies were just taking up projects, building highways and giving it back to the government. And then when the policy change came in place, and then the policy was attractive for them to invest, you'll see many construction companies have come into PPP and investing on roads, whether it's L&T whether it's GBK, GMR, Hindustan construction company. So, for major players if you look the major construction companies, who were primarily into the construction business, have now gone into PPP having a partnership with the government.

I: how does the definition of success of a PPP project vary between the public and private sector?

BK: yeah, how do we define the success of PPP. And of course, both parties have some expectation from the project. In my view the biggest thing is how would you rate it vis-à-vis success, could be partially success, complete success, 90% success, you can't say it's 100% success. If you look from the government point of view, the government was having trouble in terms of arranging funding which was required to build the roads... and then there was growing pressure on infrastructure... the only way was to invite private sector.

### **Interview 16- July 2011, Kolkata, India**

#### **Discussion about how to approach villagers with a person who is familiar with that region:**

Villagers follow *mukhia* [head of the village] blindly. They do whatever *mukhia* says. *Mukhias* listen to whatever the person on the other side of the table says. And villagers follow their instruction. They don't have any option. If they don't vacate the land, they might not even find the girl of the house next day. Hence, this is dangerous to try to talk to the villagers without approaching the *mukhia*. The best would be approaching the *mukhia* first, if his house or office is nearby. And then earn their confidence and then talk to the villagers. *Mukhia* might help. You have to play with words. You need to convince them and being a girl, you will have to be very strong to face such situation.

What is *mukhia*'s interest? 'I'm not sure... probably whatever interest those Bengali babus had during the British raj!'

You have to ask question very tactfully. No one should feel like their interest is being harmed. *Mukhia* shouldn't feel like you are agitating the villagers against him. Villagers shouldn't feel like they have been deprived of anything and shouldn't start expecting more! Land is a very sensible and valuable thing, very close to heart. So whenever you are raising an issue with land, you have to be very tactful.

Report to the closest police station with your identity card that you are going there to talk. If it has a municipality, first go and talk to the municipality office. If there is *mukhia*'s office, go and talk to them. Carry your identity card, voter ID card with you and photocopies. And in case you have a letter from university, also do carry that. Never

stay there if sunlight is gone. Leave the place at least one to one and half an hour ago the sun goes down.

It is difficult to strike a conversation casually as a girl as they would get suspicious. Also, being a girl, you have to be careful and strong to stand above such situations. Train the spokesperson and make him sharp that he speaks as you would have spoken.

### **Interview 17- July 2011, Jharkhand, India**

We headed towards Charhi. We again went to the CCL office in Charhi. Here we met a landowner who is the secretary to CGM. I contacted this person with personal connection and has lost his land for national highway. As he described, he came to know that the road will be extended and kind of understood that his land will be affected during the preliminary survey by Land Revenue Department from the state government. In the month of the survey, he received a notice saying his land will be taken for road extension and he is offered a compensation of Rs 30,000/- per dismil [local unit for land area] and 40% compensation for structure. However, his land has been measured three times, as the measurement was wrong. When asked how he understood it was wrong, he said everyone has the idea of their house, and also, when they measured in front of us, they said something else and when the notice came, it was different. He has already accepted his compensation. He mentioned that he is not sure whether he is getting the correct rate. He has filed an application with RTI seven months back asking for the correct rate and his inquiry hasn't been answered yet. He said, once the notice come, everyone goes to the BDO themselves to check the status and for enquiry. Once one accepts the compensation, they have to sign a bond that they will evacuate the land whenever the notice comes. They haven't received any evacuation notice yet and hence are staying at the same place. Also, they haven't heard of any rehabilitation plan from the government side yet. The time gap between receiving notice and receiving compensation was approx 6 months. He was in some ways happy with the road. He thinks this will do good to the region as decongesting traffic and will contribute towards development of the region. We left him with an agreement that we would meet him at this house Wednesday morning where he would introduce us to other people who are going through the same situation.

### **Interview 18- July 2011, Jharkhand, India**

We attempted calling at the next house. This house was broken from the front. However, there was some new construction underway at the back of the site. A guy came out and he said he is the owner. He said he came to know about the road extension during the survey. Then he received the government ORDER to vacate the property. It was a notice issued in newspaper with plot numbers. And then BDO issued an order with names and plot numbers. On asking whether he was happy, he said, he wasn't happy as his house was being demolished, however, he thought he doesn't have the power to challenge government. He thinks probably the road is being built for the good, but it doesn't affect him. However he plans to develop commercial shop in his house being located on the road and expects some profit from that. As he received compensation more than he paid for the land, he was happy.

### **Interview 19- July 2011, Jharkhand, India**

Then we met another person on the other side of the road whose house was partly demolished. He said the same story. He came to know about this when it was being surveyed. He received notice through newspaper and then a letter with compensation value. He wasn't happy with the compensation, has sued a case. He has already received a notice for demolition without resolving the compensation issue. He wasn't happy with the timing of the process, he thought it was delayed.

### **Interview 20- July 2011, Jharkhand, India**

Person 1: We met him in connection with the person from Kujju CCL office. He had two properties, one in Kujju and other in Mu[...]. He has received the compensation for Kujju as he was getting good price but not Mu[...] as the offered price is too low. According to him, this difference is just because it's on the other side of the road and is not acceptable to him. He has very systematically arranged all the documents related to his project. And he believes it is necessary for individual to follow the whole documentation and understand how their properties are being assessed. He also offers services related to this issue in his neighbourhood. That way he has access to many other people who are losing their land for the same project. He provided us a good documentation of notification and legal procedures which actually re-enforced his words. On the first day, he also very nicely described how they came to know about the

road and understood the road alignment by taking names of people whose houses were crossed by the road, and names of trees to align the road. He said the road was first going through the main urban area, then it was shifted in order to not demolish too many structures in the urban area and a bypass was proposed. This was acceptable. However, now government is paying little compensation for some areas, which is the issue. [Probably government proposed the bypass so that they don't have to pay much compensation?]

### **Interview 21- August 2011, Jharkhand, India**

I had spoken to the *mukhiya* in Ramgarh area in the morning. He said he would meet me at the car shop that he owns in Ramgarh. He is the *mukhiya* of the village. On my arrival, I explained him my reason for visiting him and my interest in the whole subject matter. As he explained, NHAI first did some surveying on their own and decided the road alignment. No villagers knew about this. When they came to know during the survey, they protested as the road was going through the fertile agricultural land. They were not against the bypass. They agree that we need a bypass. However, the land which through the road is going, is fertile land, these are A1 farming lands. Crops are farmed throughout the year. There are families who are farmers and it's the basis of their economy. There are other villages nearby, who had bare land, and they were happy about the road as this was taking their unfertile land.

The *mukhiya* recommended me to go to the village and talk to people who were involved in the movement. He said: A committee was formed against this taking over of land. During survey, they ceased the camera of the surveyor. Then government got the camera back later on. They put up a fight. But nothing came out of it. People whose land was not being taken, they didn't participate. And then some were scared of not getting the money at all, so they moved out. They accepted the notice. Like this, the committee was breaking up. While asking why they didn't express their concern before, he said, probably NHAI did an air survey by helicopter. So, we were not aware of this. When they came down to the field to do the survey, we protested. But by that time, the decision was already taken. Also, since the nearby villages did not have any fertile land, they were happy about the road and took the compensation. Hence, we were small in numbers. So had to withdraw.

We entered the village with *mukhiya* following him in a car. He stopped in front of this huge ground with a beautiful backdrop of hills fully covered with forest. It was looking amazing. He asked for someone from a small house which was located at the end of the ground.

Masterji showed us the little pole in the ground and another pole at a distance, it was far away, so I couldn't figure it out first. He showed us how the road is aligned showing in the air. The future road goes through farming land, it was completely green and fertile all over the year. I also met a farmer, a very poor person who is losing land in this road. Government is paying them something like Rs. 4000/-per dismil. He said we requested them so much. The land 500m away is not fertile. No one would have had any objection. But they didn't listen to us. We want road, we want bypass; but at what cost?

I was completely impressed by the scenario. Image analysis needs to be done.

#### **Interview 22- August 2011, Tupudana, Jharkhand, India**

The shopkeeper hasn't claimed the compensation yet. There is an existing one lane narrow road. This will be widened. In 2 minutes drive from this place, construction is under progress. He got to know about the project when survey of the road was done. His house was of one storey and very low quality construction.

#### **Interview 23- August 2011, Tupudana, Jharkhand, India**

The second person. They have lived there for almost three generations now. In their case, they are not happy with the compensation. However, there is no one to talk to. Hence, they spoke to the project manager when they came to the site for construction. He said we had placed a red flag there and said they cannot carry out the work without talking to us. The project manager was ready to pay but we didn't have the paperwork ready by that time. Later on they paid the *Mukhiya*, and were permitted to carry out the job. However, we haven't received anything yet. The compensation paying process is unfair. Government pays their own rate. They don't care about market value. But when we need to buy plot, we have to pay at market rate. And there is no logic behind distribution of compensation. If you can negotiate better, you get better value. He said he is happy with the road, he is sure the area will improve; but they are suffering. They have to be dislocated. There is no rehabilitation programme from government.

**Interview 24- August 2011, Tupudana, Jharkhand, India**

The person with son: they got to know about the road during survey, which was carried out a long way back. He wasn't satisfied with the compensation but wasn't sure where to go. He complained about the 10% TDS reduction.

**Interview 25- August 2011, Tupudana, Jharkhand, India**

With other two persons. They weren't very open to discuss. They had complaints about compensation for land, compensation for structure. Moreover, they said now since the road is in operation, there is high speed traffic on the road. This road has divided the village into two parts. We have to cross the road frequently. They promised to make a pool/water reservoir on this side, which they haven't done so far. There is no underpass near by. The closest one is at a distance of 2km. However, contractors are using that underpass as a store for their own material, so, it cannot be used now. And anyway, it is too far from this place, how can we walk so far just to cross the road? Forget about animals, many people will die out of accident. We are more concerned about kids. We adult can think and then go for crossing the road, what would a kid understand? While asking why they didn't ask for an underpass during construction, they said, if we knew so much, then the road would have been built long ago. And also, we were not aware of whom to talk to and didn't understand that we would need an underpass. Now when the road is built, and partly under operation, we do understand its effect.

**Interview 26- August 2011, Lalgutua, Jharkhand, India**

This house was located within 3 minutes' drive where a huge retaining wall is under construction with the logos of RRR and JARDCL. The construction work is huge enough to attract everyone's attention and also obstructing the traffic on the existing road. In short, no one staying around the area could miss the construction work. However, the work has been started from one point where LA has been completed and then we continued on the narrow one-way lane through the village. It was obvious that these houses will be demolished as well. The structure of the house is one-storied, of low quality construction, with a front yard. A folding bed was laid in the yard and there was a food stall cart parked there.

Three men came out of the house. This family have been living there for almost 8-9 years now. They were rehabilitated 8-9 years ago as HSE were building a factory. This

guy's great grandfather used to work there. So, everyone was rehabilitated and were given 5 dismil of land. He said that they haven't been notified of how much land will be taken and what price will be given yet. Of course, from the upcoming structure on both sides, he understands that they have to evacuate. He said: we would be homeless and jobless. We just want government to let us know in advance. Let us know the amount of compensation and profile of land to be taken. Now we are hearing this for long and we are scared that all of a sudden we have to leave. We are not sure where to go. Price of land and construction is increasing day by day. Now if they would have settled the matter last year, we could have bought lands cheaper. Even I want to build house like this for my family. I also want them to be settled. And we understand government will take land anyway, at their own price. It would be better for us to move things faster as it will be unaffordable for us.

He pointed us towards some construction work going on at a distance and then pointed out the huge construction work on the other side, and then made a connecting line by hand in the air to show that see, this is how the road will go. Look at that house, before it was sacrificing almost four columns, but now, after the person spoke to the contractor, it is sacrificing only one. They have changed the geometry of the road a little to save the structure. Also, if you keep on going inside, we heard that the contractor have changed the road profile a little to save some structures. We are also hoping that they would even listen to us. But we are uncertain about what exactly will happen and whom to approach to know. I feel trapped where I can see everyday that the construction will take my home but not sure at what cost and what will happen. I am just a food hawker. I don't have any other job now. This way I will be homeless and jobless.

#### **Interview 27- August 2011, Kathiatar, Jharkhand, India**

Kathiatar: This house was a double-storied house, apparently of better quality than others, with set-back from the road. This road has already been constructed. It's a big family with 3-4 children. I spoke to the head of the family, who was unsure about purpose of our visit. They of course got to know about the project from the horse's mouth. Government said no building will be permitted within 100 ft from center of the road, as the road will be extended. They showed us that their property used to extend until the half of the newly built road. They said: we used to have a big tree at exactly where you are standing now. They got compensation and had built this new structure at an offset as they had enough land left at the back side. They got the compensation.



However, securing the compensation was a lengthy process and tiresome. However, now all the bad times have passed, they are settled. While asking whether they are happy with the road, the head of the family said, yes of course, why not? Everyone is wishing they would have had their house on Ranchi Ring Road. We do have our house on RRR now, why should I complain? I am really happy. His son added: of course, we need road and we are optimistic this will do good to us.

## Appendix B. List and transcript of group interviews

Int. No.	Project	Designation	Date	Location
01	HRE	Community group affected by the road widening	July 2011	Mandu, Jharkhand, India
02	HRE	Farmers	August 2011	Ramgarh, Jharkhand, India
03	HRE	Doctor and key founder-member of 'Save the Land Committee'	August 2011	Ramgarh, Jharkhand, India

### Group interview 01- July 2011, Mandu, Jharkhand, India

14 July: trip to villages, talking to people

This trip was organised with prior appointments with some of the gatekeepers who were known through personal connections. Our main trip was to Mandu, where people are not satisfied with the land acquisition process at all. Their main complaint is regarding compensation. We took a car to Mandu. My contact had requested some of the people to be present there. We went and sat in a tea shop. It's a small stall with a tin roof. We were given plastic chairs to seat there. They started talking to us explaining their grievances. I had to interrupt in order to know the whole process through particular questions.

Although I started talking to a single person, others were in the same situation and they started answering directly and indirectly. It finally became a focus group rather than a single interview. Main points of their complaint were:

1. Unhappy with the land value.
2. Unhappy with the valuation of structure; everyone getting the same rate for structure irrespective of what physically exists.
3. Discrimination of compensation in spite of same location of land, same rate of structure.
4. Case of three brothers, having same land, same structure. but receiving 24 lakhs, 22 lakhs and 2 lakhs as compensation as the third did not bribe.

5. Paying for land only what is required for a road. In some cases, one's a narrow strip of land or narrow strip of structure is left out. No compensation for that. They raise the question: why is that?
6. They get a rate of Rs 30,000/- per dismil. Now when they have to buy land, they will not get anything on the road, this will be inside. They have shops and their businesses won't run well. Also, they have to pay rs. 60,000/- per dismil for that.
7. In addition, they have got a paper with compensation rate from the court (gola). It shows for a business property, one should get Rs 1600/- per sq ft for stucture. However, they have got only Rs. 562/- per sq ft. This has broken down their trust in the government.
8. They have attempted to talk to officers. They had to travel for 2-3 hours to go to the place. They have attempted to go 4-5 times. Everytime they were told that either the officer is not here or is busy.
9. They said, they will send someone for survey 6 months ago and no one came.
10. Junior staff come to the site, they are highly corrupted. They randomly fix the value. There is lack of forum for expressing grievances. One can launch a complaint but doesn't expect any answer back as they haven't experienced that at all.
11. Senior officers came, made promises and went back. They never came back to do this. They said they will let their higher officers know, it's not within their capacity.
12. They said, probably the road will do good to the region, but at what cost? Making so many people homeless? There is no provision of rehabilitation programme in their knowledge from the government.
13. One guy said, I have complained long back. Have been there 3-4 times. How many times can I travel so long? Now I have decided. If they send a notice to vacant houses, and try to do without my consent, I will just lie down in front of the house. They have to take the roller over me.
14. They think four lanes was still okay, why would you need a six lane road? It is taking so many people's home! They believe government is doing so now so that they can get the land cheaper. If they want to take it after 10 years for extending to six lane, they will have to pay much more.
15. They still don't understand the implication of having six lanes. They live on the both sides of the road. They make speed-breakers on their own to slow down the

vehicles. They don't understand how things will change once the road is being maintained by private sector.

### **Group interview 02- August 2011, Ramgarh, Jharkhand, India**

For Ramgarh bypass, when NHAI did the first survey by physically appearing there, they said there are three options and they will choose one of them. Hence, local communities were not sure whether the road will go through their village, hence, no opposition or protest was demonstrated. Later on this option was chosen. Since there are all fertile agricultural lands, communities protested. They formed a committee called '*jameen banchao somiti*' which means 'Save the Land Committee.' Those from the community whose land wasn't taken didn't participate. As one key member mentions, they wanted to form a larger committee so that police cannot just come and arrest a few people. This committee went for a lawsuit, they went to the Minister, filed a case, went to Delhi. The case is still pending. They could have easily have taken it through unfertile lands 500m away. They were given that option. NHAI didn't do it and stuck to this alignment. The agricultural department was of no help. DC of the area came to visit them, sat for long conversation and requested them to accept the compensation and give away their lands. As regional actors they cannot go against federal government policy. As you can understand, these farmers are poor people, it's difficult for them to run a legal case.

The nearby other villages, they were happy that their land was taken as it wasn't fertile. So, they protested in the beginning and then withdrew. We were even more unhappy as there was actually a bridge on our stretch. We are losing the land but we don't have access to the road. The road is going through a upper level. So, we won't get any benefit. There is not even a chance of increasing property value.

This was not a question of compensation. First the road was planned through urban area, they protested. Then through Ramgarh. We heard of the bypass 4-5 yrs back, but weren't sure where this will go through. When they came second time for the survey, we took their all instruments into our custody and they ran off. Later on the state government authority came to collect those instruments.

### **Group interview 03- August 2011, Ramgarh, Jharkhand, India**

We protested. We formed a community and tried to strengthen the community as police might come and pick up someone from home. That's not what we want. Road developers were so persuasive. We filed case. Chief justice of Jharkhand said, he won't interfere in central government policy. If he doesn't interfere in central government policy that is affecting local people, then who would? We had a governor 2-3 yrs back. He had an adviser called Mr. Dubey. He said, development work is welcome in Jharkhand but not at the cost of damage to villages. We also took reference of such policies. But nothing happened. They cheated us. Government cheated us. We have all documents. I didn't disclose everything in the court. It was fertile land which is being taken. Then they (state govt) broke the committee. They begged us to leave the land. They couldn't fight NHAI. Some of the local people, whose land wasn't that much affected, withdrew from the committee, accepted compensation. They were told that if you don't accept compensation, road will be built anyway, but you won't get any money. Only few were left and hence the whole committee had to withdraw. The association wasn't strong. They said, if you don't take the compensation, it will go to treasury account. Road will be built. You won't get any money.

Own reflection:

People protest violently in a desperate state when they don't have any more trust in the government and law; when law can no longer give them security. Here, we don't question the intention of government, don't question the fairness of government employees. We don't doubt them, we challenge the law.

It looks like a very big political question on a broader scale, but looked at in detail from the ground level, it can be seen as a small matter of sensible designing (probably introducing the larger population to the project at an earlier stage). Building infrastructure at the cost of people who are overlooked in the process and deprived of the benefit.

## Appendix C. List and transcript of non-participant observation

No.	Name of meeting	Project	Date of meeting	Location
01	Compliance Committee Meeting with IL&FS and JARDCL	RRR	23 July 2011	Ranchi, India

### Non-participant observation -01, July 2011, Ranchi, India

I was allowed to attend a compliance committee meeting between IL&FS and JARDCL with the consecutive Independent engineers. In the meeting, the IEs report to the committee about the progress of the project. Such projects are held once a month. Such meetings are supplemented by a monthly report presented by the IEs on their observations and recommendations.

#### Venue:

This meeting was organised at the office of the concessionaire. They have a big seminar room with air conditioners. Such big luxury rooms are not available in the public sector offices. The meeting was held on 23<sup>rd</sup> July, a Saturday, from 5pm onwards. It lasted for approximately 3 hours. There was discussion about two projects: the Ranchi Ring Road and Ranchi Patratu Ramgarh. It was attended by six people excluding me. It was surprising to have a public sector official meeting on Saturday evening. There was one person appointed from the side of the concessionaires to note down the minutes of meeting. He was being constantly instructed by public sector officials regarding what to write in the minutes and what not. From the concessionaire's side, the whole group was also served with delicious food!

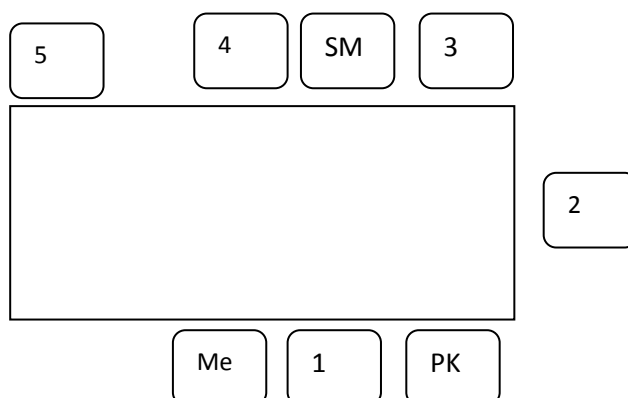
#### Discussion:

Whereas the main topic of discussion in the meeting were the technical details of the project, it was interesting to observe the power relation through the sitting arrangement, waiting for the main person to come, having the whole group inside the room and then calling IEs one by one, pattern of question answering, one's participation in the conversation. Overall impression from the observation, it was not mere reporting by IEs to the committee by presenting plain information, it was also a learning process of how to present the information. There was argument and negotiation between public sector

officials, concessionaires and IE. In the process, public sector officials (higher power due to strong bureaucracy and influenced by the concessionaire) took the role of a moderator and teacher whereas IEs had little power to impose their opinion and were constantly challenged by the concessionaire, and had to take the role of a learner on how to present the data/ information with interpretation to present the reality. This is the only meeting I was allowed to physically attend. And hence, it was interesting to observe the interaction pattern between actors and their control over what goes into minutes of meeting and what not.

We gathered into the room before starting the meeting. When we were still waiting for the chair to appear, an informal conversation started between concessionaire, IE and present public sector official on the requirement of additional land. The public sector officials received some request regarding the need for additional land to acquire. From the discussion it came up that a 3 km chunk of land was acquired for the project due to wrong alignment. In this particular case, it was acquired from the forest department. The main discussion was about what to do with that land now. The concessionaire said, now this is your land. It will remain under your custody and you can use it later on. From my prior experience, this type of practice is very common, that land acquired for some project is not being used for that project for the sake of maintaining road geometry. There was a proposal to construct a building. But the question raised was, it is in the forest. Who will go there? The concessionaire made a joke saying Maoists will visit you there. The public sector actor said, how about parking along the highway? Something like resting area along the road?

Seating arrangement



1-

PK-

2-

3-

SM- the concessionaire director

4-IEs

5- Person taking notes of minutes

Ranchi Ring Road:

Before starting the meeting, it was explained that the system is, the concessionaire would raise a work list for supervision by the IE each month. 30% of that list must be supervised and given report by the IEs where 5-10% of the same must have been supervised by the team leader from the IE side. Each report presents such a table at the front of the report.

At the start of the meeting, there was a discussion on the huge location change of the road and accepted drain. SM and IE were controversial.

It was mentioned that as mentioned on page 13, a 600 dia ½ dia pipe is not available in market as specified in the contract specification. Also the weight cannot be handled. Hence, a drawing has been submitted showing recommended changes. This is about chute drain pipe. IE and SM were controversial. IE mentioned, there will be cost implication due to this change which will come up during COD at the end. Here, the concessionaire is saving money by manipulating the specification.

SM argued the job of the IE is to see whether it's technically sound, financially will be decided later on. IC was drawing example from the contract. However, public sector officials were also convinced by SM. 1 and PK said, the job of IE is to see whether it's structurally sound and technically viable. PCC is coming at the bottom, we should discuss whether internal plastering is required. If the functional requirement is fulfilled, then it should be accepted. The contractor can unofficially construct one sample for demonstration. SM also mentioned that they have also constructed 5 spans instead of 4 spans as was in specification. And they have also incurred more costs there, how about that? So, the public officials and SM told IE that let's for now concentrate on the



functional part and technical viability. We can evaluate the overall cost implication at the end.

As the IE has mentioned some observations that were not rectified even after pointing out, SM told him that there was no deadline. I and PK rectified, there is no time limit for rectification. It's in the interest of the concessionaire to rectify this on time otherwise this might go into punch list. As the IE mentioned, there are certain things that cannot go into punch list. [Punch list which cross-checks the item and its quantity; not quality]

Public sector officials told IE that, 'your role is also to suggest and record what concessionaire has said. Then it will come under rectification'. I and PK were most verbal in the conversation. As an explanation of why this hasn't been done, SM said, that we will have to find out the problem while taking the overall approach slab out. We have to see why weep holes are not working. They can't do this in the rainy season.

Hence, it was decided that rectifications will be done after rainy season. It was advised to the IE to mention time in his record, otherwise, it creates problem at higher stage and confusion! And also, this way, such incomplete information will get recorded. [There was a concern from the concessionaire side on what is being recorded and what not.]

Public officials were telling IC how to write reports reflecting real situation as it gets recorded. So that is gets reflected in the COD at the end. At COD, one has to show the positive and negative impacts. As PK told IC, these are the issues that were raised but not closed yet. As a response to that SM clarifies, I'm from both sides and I won't hide anything. [From this conversation, there was a confirmation of trustworthiness from SM to the public sector officials.]

The next issue raised was regarding the process of construction but not regarding the end product. It seems that such a process might affect the efficiency of the final product and it might also have cost implications. As SM clarifies, the earth dumping and the scaffolding were done by separate teams. Scaffolding could have been done on other side. The team took a decision on the spot and did it. As IE wrote that it wasn't done, SM claimed it was partially done. So, the IE must keep a tally of observation, what is rectified or what is partially rectified. There was objection of the term earth dumping. SM says, IL&FS discusses such issues with IC on site. Such discussions have to be reflected in the report. This report will go to Sir, and if it doesn't reflect all discussion it

presents incomplete picture. Moreover, no RFI (request for investigation) has put through yet regarding this area. The main concern of the discussion was that at times specifications are not strictly followed due to site condition. Such site constraints are reflected through discussion. However, they are not reflected in IC's report. Such discussions are not reflected in any other type of document. Hence, there is a gap between reality and what is being documented which can definitely be considered as concessionaire's fault. There is a communication gap. The observations written in IE's report are correct. But the placement of observation in the report is not completely true. This is like '*Ashwathama hata iti gajo.*' [Presenting the truth in manipulated way]

In addition, it was written in the IE's report that public sector officials have recommended something. Public officials said that they don't have any authority/ power to dictate to the IC/ concessionaire. They can simply raise some issues; the concessionaire and the IC have to take the decision. So, it's better to not put things this way in the report. This was connected to some rain water harvesting system in dam area. There was even a media report regarding how the road construction is affecting the working procedure of dam. Regarding this, public official 2 mentioned, don't even install rain water harvesting system in the dam area. The IC has to decide whether it's upstream/ downstream. The discussion continued about how to deal with dam areas. Public official 2 said, the water shouldn't be blocked in the dam area. They also read the news out loud. Their interpretation was that the media people want to create news. And also, they don't understand all the technicalities and don't follow the system thoroughly. They visit the site on a particular (unfriendly) day and write report. It is not essential to impute too much importance to this. However, we have to confirm that we are not affecting the functioning of dam.

IC refers to previous meeting. It was decided that rain water harvesting should be done to recharge the ground water. However, dam does it itself. It is self-charging. Public officials were very specific about what govt officials mentioned and what IC said. They said, it is IC's and concessionaires' responsibility to decide.

These discussed observations are definitely an outcome of concerned persons' site visit. Secretary of PH had visited the site: they found out ½ dia is difficult to build. This is a practical approach, hence, it should also be incorporated and modified in the proposal.

Ranchi Patratu Ramgarh:

As present public officials explained to me, IC acts as a whistle blower here. In the compliance meeting, they act as supervision consultants. The methodology of completing one job has to be discussed with the concessionaire. When to put forward a RFI.

Plantation to hold land required near hair pin bend to avoid soil deposit. It's a technically challenged situation.

Regarding the culvert, it wasn't detailed out enough in the DPR. The water flow wasn't considered. Now the detailed design is being done. In DPR, the road condition was 55m, now the road is 12m. It couldn't be realized that time. One of the public official said, I thought this with other examples. Thought it might be problematic with Chaibasa Ranchi-1 facing –step Karke. As road is widened the water flow is heavier.

The committee members were satisfied with this IC as they had introduced many other categories in the table to reflect the actual scenario.

## Appendix D. List of accompanied site visits

No.	Description	Project	Date	Location
01	Site visit to RRR project, Sections III and IV, with team leader from concessionaire side	RRR	August 2010	Ranchi, India
02	Ramgarh Site visit	HREL	July 2011	Jharkhand, India

### Accompanied site visit-01, August 2010, Ranchi, India

Site visit to the ring road, sections III and IV

I visited the site with the team leader from the concessionaire's side. The project leader from JARDCL side took me to the site of the Ring road Section III and IV, where they have started working so far. The main thing I noticed was the problem with land acquisition. There are permanent structures even on acquired land. Those structures are illegal and it finally becomes the responsibility of the contractor to mutually settle the situation and remove them before construction starts. He also mentioned, for example, to resolve the LA issue, government is paying twice the amount of actual compensation if people willingly give away land.

Also, in the case of utility shifting, it is government's responsibility but concessionaire takes the initiative to expedite the process.

There was a discussion about the factors influencing development in Jharkhand.

1. Government has tried to invite tender for Ranchi-Tata road on PPP basis. No one responded. This is due to the anti-social elements in the area. It is not a good place as workers might have life risk.
2. The second important thing was the law about transfer of tribal land. By law, tribal lands can be only transferred among tribes. They cannot be transferred to outsiders. This was due to securing the land ownership of tribes. Although the law is national, we see the impact of this in Jharkhand, as 95% of private land is owned by tribes. Government can take over any land. Hence, they can take over land for road construction. But even if we build a road, no major development will come up in the region. This is also why Ranchi is not expanding. It has

become congested at the core. But since the outer area is mainly occupied by tribal land, it remains vacant.

3. Laal jhanda (the red flag) is the most dangerous sign in Jharkhand. It has religious values. Generally, the red flag is flown at a place of worship. People will not do any work if you put a red flag there. Here the local residents are misusing this concept. If they have posted this flag, that means you cannot work there. We have built these two sides of road, but could not work in between because of this. Now when the contractor comes, they will come to claim their demands. Contractor has to take care of these things at the site. We are aware of such problems while planning, but remain silent on this, as contractors would demand more money from us for these things.
4. Plant machinery and material lab: I visited one of the two material labs of the contractor of the Ranchi Ring Road project. As he said, this is our planning. We plan about how to finish work in two years. We do storage of material, testing of material and testing of finished work in the lab. We have crushers. This crusher crushes the stone into aggregate. We call the crusher the lifeline of construction. If we have aggregate, our construction will be on.
5. Forest clearance: there are too many formalities you have to do. Too many persons are involved in the process. It is not a single window process. In the cases of Gujarat, and Rajasthan, it is different. Their government has taken initiative to ease the process. Even if everything is in place, it takes one year for clearance.
6. Railway over-bridge: we have submitted all paperwork one year ago. But still we haven't received permission.
7. Self reflexivity: finally did the site visit. There are materials for good ethnographic study. I didn't intend to do so though. Good to see that such a good quality road is being built here. Good insight from the project leader who accompanied me for site visit. Real problems on site. 'Local issues' that make a difference. Need to think from both the government's and the private sector's point of view. Ultimately it is a mess. But still can't avoid the whole procedure. The team leader said that we keep 'silent' on such issues during planning.

## **Accompanied site visit-02, July 2011, Ranchi, India**

26 July 2011

### **Trip to Ramgarh**

I had spoken to the mukhiya in the morning. He said he would meet me at the car shop that he owns in Ramgarh. He is the *mukhiya* of the village. On my arrival, I explained to him my reason for visiting him and my interest in the whole subject matter. As he explained, NHAI first did some surveys on their own and decided on the road alignment. No villagers knew about this. When they came to know during survey, they protested as the road was going through the fertile agricultural land. They were not against the bypass. They agree that we need a bypass. However, the land through which the road is going, is fertile land, these is A1 farming land. Crops are farmed throughout the year. There are families who are farmers and it's their economic base. There are other villages nearby, who had bare land, and they were happy for the road as this was taking their unfertile land.

He recommended me to go to the village and talk to people who were involved in the movement. A committee was formed against this taking over of land. During the survey, they seized the camera of the surveyor. Then government got the camera back later on. They put up a fight. But nothing came out of it. People whose land was not being taken, they didn't participate. And then some were scared of not getting the money at all, so they moved out. They accepted the notice. Like this, the committee was breaking up. While asking why they didn't express their concerns before, he said, probably the NHAI did an air survey by helicopter. So, we were not aware of this. When they came down to the field to do the survey, we protested. But by that time, decision was already taken. Also, since the nearby villages did not have any fertile land, they were happy for the road and took the compensation. Hence, we were small in numbers. So had to withdraw.

We entered the village with *mukhiya*, following him in a car. He stopped in front of this huge ground with a beautiful backdrop of hills fully covered with forest. It was looking amazing. He asked for someone from a small house which was located at the end of the ground.

Masterji showed us the little pole in the ground and another pole at a distance, it was far away, so I couldn't figure it out at first. He showed us how the road is aligned, showing

in the air. The future road goes through farming land, it was completely green and fertile all over the year. I also met a farmer, a very poor person who is losing land in this road. Government is paying them something like Rs. 4000/-per dismil (unit of measurement for land area). He said we requested them so much. The land 500m away is not fertile. No one would have had any objection. But they didn't listen to us. We want road, we want bypass; but at what cost?

I was completely impressed by the scenario. Image analysis needs to be done.

As it was mentioned by the villagers (Sukhiya and few others):

For Ramgarh bypass, when the NHAI did the first survey by physically appearing there, they said there are three options and they will choose one of them. Hence, the local communities were not sure whether the road will go through their village, hence, no opposition or protest was demonstrated. Later on this option was chosen. Since these are all fertile agricultural lands, communities protested. They formed a committee called 'jameen banchao somiti' which means 'Save the Land Committee.' Those from the community, whose land wasn't taken, didn't participate. As one key member mentions, they wanted to form a larger committee so that police cannot just come and arrest some people. This committee went for a lawsuit, they went to the Minister, filed a case, and went to Delhi. The case is still pending. They could have easily taken it through infertile lands 500m away. They were given that option. NHAI didn't do it and stuck to this alignment. The agricultural department was of no help. The DC of the area came to visit them, sat for a long conversation and requested them to accept the compensation and give away their land. As regional actors they cannot go against federal government policy. As you can understand, these farmers are poor people, it's difficult for them to run a legal case.

The other nearby villages, they were happy that their land was taken as it wasn't fertile. So, they protested in the beginning and then withdrew. We were even more unhappy as there was actually a bridge on our stretch. We are losing the land but we don't have access to the road. The road is going through an upper level. So, we won't get any benefit. There is not even a chance of increasing property value.

This was not a question of compensation. First the road was planned through an urban area, they protested. Then through Ramgarh. We heard of the bypass 4-5 yrs back, but weren't sure where this will go through. When they came second time for the survey,

we took their all instruments into our custody and they ran off. Later on the state government authority came to collect those instruments.



## Appendix E. Transcription of field notes

Sl no.	Event	Project	Date	Location
01	Accessing data on the Hazaribagh–Ranchi Expressway project	HREL	July-November 2010	Kolkata/Ranchi, India
02	‘Thinking aloud’ impressions of the Ranchi Ring Road	RRR	August 2010	Ranchi, India
03	Road trip from Ranchi to Hazaribagh	HREL	12 July 2011	Jharkhand, India
04	Land development for HREL road-widening project	HREL	August 2011	Jharkhand, India
05	Visiting affected communities of Ranchi Ring Road	RRR	August 2011	Ranchi, India
06	Visit to Central Coal Limited office	HREL	August 2010	Ranchi, India

### Field Note-01, July-November 2010, Kolkata/Ranchi, India

Log book for fieldwork from July-November, 2010

27 July 2010 (Tuesday)

The Project Director for Jharkhand, located in Ranchi, is busy with some court cases. It was not possible to reach him. Spoke to project manager. He asked for the letter that I will email tomorrow and then we can have a chat about when I might want to go.

Regarding the project in Jharkhand, the project manager spoke to PD. They suggested me to write a letter to the GM, for the state of Bihar and Jharkhand at Delhi office to secure permission for data collection. Only then they would be able to provide data. And hence, also, provide a detailed outline of your project? Talk to GM over phone on Friday asking whether you can email the letter instead of mailing and also whether you need to personally go to Delhi?

3 August 2010 (Tuesday):

The GM at Delhi received the letter and he mentioned that he would get the approval from his director. This whole process might take 2-3 days. He will then forward the approval to the respective project directors. Will call again on 6<sup>th</sup>, morning.

18 August 2010 (Wednesday):

Finally GM mentioned that I have got the approval. He is preparing the letter for the project director and the PD will get it by tomorrow. Hence, it should be okay to visit Ranchi next week.

20 August 2010 (Friday):

Attempted to have the first interview, but failed. However, the concerned person said he will forward me the number of the concerned person for the Ranchi-Hazaribagh project and that person is located in Ranchi.

24 August 2010

Today is my first day of actual field work. I came to Ranchi this afternoon. Satabdi left Howrah station at 6:05 am in the morning and reached Ranchi at 1:10pm. I took a train after 5 years. I was impressed by the services. The coach was a chair car and air-conditioned. They served mineral water, tea and newspaper in the early morning. Then breakfast with tea and cold drinks. They also served lunch and then ice cream. They were also playing good Hindi music. The servers were in uniform and addressing passengers in English. It was quite professional and I was impressed. However, it might be that my sister could afford to buy a ticket for me in a good train. We were comparing the price with flight. But still, it was a nice journey.

I was picked up from the station by an acquaintance who I was introduced to by my maternal uncle who is a DGM in Balmerol. He is a business man in Ranchi and knows the city very well. I was taken to a good hotel by him, offered a nice room at a discounted price. Then he accompanied me to the Vodafone office where we fixed the roaming problem of my phone. Then we headed towards NHAI office. There was another guy with us from Balmerol who knows the place better than this person. The project director gave me a copy of the letter he made for concessionaires and assured me of his cooperation in conducting the field work. I also met the project manager, whom I have spoken to many times before over the phone. The PD forwarded me the

contacts of the engineers, contractors and concessionaires and assured me of meeting personally Friday morning.

How did I find the place?

I have been to Ranchi once before, that also long ago. I didn't have the sense of understanding the city's nature at that time. From the image of the city, my first impression was that Ranchi is a low-profile city. However, after being escorted by this guy, I also started noticing the expensive cars around us, high-class housing, world-class shopping malls. Hence, what I was noticing is the huge difference between high-class people and low class. It was surprising to me as I would have expected that in a big city, but not in a small town like Ranchi. There is almost no existence of any middle class. It is so clear that the tribal class has not experienced any growth or development at all. All the developmental efforts have been done for the service sector serving Shell, Mecon and another large company. however, a business class evolved in the region much later.

One of the surprising things I came to know was that the city has recently started a city bus service system as they will host the national game on Feb. Otherwise it was purely based on para-transit such as auto-rickshaws. I should mention the auto-services are not very decent looking here. I started discussing this with my host, who mentioned that it is so obvious because it still has the huge tribal population whose life has changed very little so far. This city was based on services and thus it has a good education system till 10+2. But then it doesn't have well-established education system.

I also spoke to him about people's trust in the government. He mentioned the difference between the sophistication level of central and state government. He mentioned that the state government still doesn't have that work culture. Even in a joint sector company you can find out the difference in attitude between government and private sector employees.

This state is under presidential rule. As he mentioned, the central government considers this as a transition period. They know some political party will form a government soon. Hence, they are not in favour of taking any major development decision. Also, due to the urban land ceiling act, Ranchi did not experience any major development. I would like to talk to the PD about the differences in dealing with such projects in a state and a UT [Union Territory].

As the PD was mentioning over the phone, only land acquisition is in their domain. Otherwise they are just coordinators of the project. However, it was obvious that he was trying to avoid the call. So, everything mentioned in the call might not be absolutely true.

My experiences at the site:

On my first visit, I found people very cooperative both from the government and the concessionaire side. The PD, NHAI was the representative from the government side here. From his behaviour, it was quite apparent that he is a mid-level manager. He is just following orders from his top bosses. Since he has received an order from the GM, he is being cooperative. He was friendly and willing to help. My first interview with him went well and he was quite open to me in discussing topics.

Also, the PD from the concessionaire side was very cooperative and probably, over-friendly. I did not reciprocate to his overfriendliness which might have made him step back later on. Also, he got conscious when I wanted to interview him. He literally backed off when I explained the whole process of interviewing to him and mentioned about signing a consent form. I consider that was a mistake on my part. As he said, he has to follow certain rules and decorum of his company. And hence, he has to talk to his bosses who are located in the head office at Mumbai to find out whether he can talk to me. He made the whole process complicated. He also spread the word among his other partners like the PD, NHAI and IE. Later on, I managed to interview the IE. But was unable to get help from the PD, NHAI regarding diary keeping or meeting observation. The PD from concessionaire side had expressed that he is feeling like he is being interrogated. Why would a researcher need to talk to him instead of just going through the documents? This comment made the PD, NHAI uncooperative with me and that made the project almost closed for me.

Some observations:

It was interesting to see people's behaviour to understand their relations in the partnership. PD, NHAI received the order from GM, NHAI at the Delhi office. He directed the PD, concessionaire to cooperate. When I was in the concessionaires' office, the PD took good care of me. And he was kind of overruling on the IE. However, when he was at the NHAI's office the next day, he was almost a different person. It was evident that NHAI is the most powerful organization in the partnership and the

concessionaire wants to keep them happy. However, during the interview with the PD, NHAI, it came up that the PD, NHAI has to run to the secretaries of state government departments on the whims of the secretaries as those secretaries are doing NHAI a favour by doing land acquisition, utility shifting and approving clearances from different departments and facilitating project activities.

## **Field Note-02, August 2010, Ranchi, India**

### **Case Study on State Highway Sector**

The government of Jharkhand invited private sector companies through their Road Construction department to form a Joint Venture Company to construct good roads in the state. The motive behind inviting private companies was basically their resource crunch. Private sector companies were invited through bidding at a national level. The IL&FS was the *most conducive* partner. So, IL&FS and GoJ formed a JV called JARDCL. Here IL&FS is the leading partner with 74% share and GoJ has 26% share. JARDCL is responsible for planning and designing of state highways, and selection of contractors. This JV company is responsible for development of state highways. And they are allotted for development of 1500 lane kms. JARDCL prepared the DPR, cost estimate and tender document for road construction. Then the EPC contractor was selected through a bidding process where we had winner selection criteria as and lowest bidder. Then another private sector company was formed as a concessionaire for the highway construction and maintenance of roads. This company had to be formed from IL&FS only. Hence a purely private sector company was formed with 100% share from IL&FS, Jharkhand Road Project Implementation Company Ltd (JRPICL). JARDCL will monitor and supervise the project implementation. JRPICL is the concessionaire. However, GoJ will make the annuity payment. JARDCL also has separate team for quality control of the project.

-What did you mean by most conducive partner? Why was IL&FS interested in participating? Was there any bidding process? How was it formed?

-How does IL&FS participate in JARDCL? What roles do they play? In planning, DPR. Cost estimate and tender document preparation, does anybody from the government side participate? How? How frequently do they meet?

-How was the planning of these three road projects done? Please elaborate in terms of traffic survey, origin-destination of road, alignment of road? Who were other interest groups? How does it fit into the broader planning framework of Jharkhand? Was any other dept like Urban Development dept engaged? Was it integrated with National Game?

-First the contractor was selected and then the concessionaire company was formed? That means concessionaire didn't subcontract the project??

-Integration with mining dept and forest dept?

-Members of JARDCL and JRPICL; Are they different by disciplinary background or the same members? If same members, then how do they differentiate their roles? Is there any legal obligation like supervising work between JARDCL and JRPICL? What happens in case of disputes?

National and state highways do not have any constrained definitions in terms of characteristic or design. It only depends on who builds and maintains those roads. Surprisingly, only national and state highways have to secure environmental clearance. For example, the ring road is known as new alignment or green ring road. Since it is not a highway it didn't have to secure any environmental clearance. So, the construction was smooth. But now the government is thinking of declaring this as state highway.

Externalities are much more in case of toll project. This is not only because of peoples' attitude. It is also because of there are other ancillary projects under the state government even in peripheral sector that would make a toll project successful in terms of getting return. If state government is not proactive and is not making sure that all those peripheral projects will be in shape while the road projects get over, then there would be no interest from the private sector's side to invest in such projects.

This type of models might be called Private Sector participation, but can never be called partnership. It is clearly written in the contract that there is no partnership. This means that there should be no sense of partnership. While in toll projects, the consortium leaders want to develop sense of partnership among private sector actors, so it might be private-private partnership. In the annuity model there is sense of ownership for the consortium but they do not have any urge to develop partnership or assure the overall development as they would get their annuity payment anyway. In case of toll, it is in the consortium's interest to generate more users. In case of annuity, it is in the interest of

public sector as they are collecting levy. But in case of national highways, NHAI is collecting levy and paying concessionaire. So, NHAI would put pressure on the state government to complete ancillary projects on time. They might even extend help to state govt? So, the risk and uncertainty is in the hands of NHAI. Hence, they are more active, proactive, putting pressure on state govt, more powerful, demanding? In case of toll, is the concessionaire doing the same?

Conflict of interest. Concessionaire hires consultant to assure their interest is being taken care of. The consultant brings his expertise in terms of bringing knowledge about standards you have to follow according to guidelines. They also look for the consultant's credibility (other projects) to assure that the knowledge is sound. This is something they have to rely on.

Although it was not possible to ask questions on the power relationship between stakeholders, it was possible to gather some comprehensive ideas about the relationship between partners from the overall setting. Also, I felt that one should spend enough time in the office setting, through active participation in the process, to explore the power relation. In case of annuity project, the private sector partner or the IE does not have any sense of partnership or ownership of the project. They deal with this project as it's a government project. But they do have responsibilities towards it as they have to maintain the project for 20-25 years, whatever the concession period is. It seems that the concerned government department has the highest authority in such projects, as they are clients. In simple words, as they are going to pay private sector, they do not want to make them unhappy. Hence their concern is considered in every decision. Although the private sector is investing money now, they are doing so to get returns from a project. And in the case of annuity payments, they will get their returns from the public sector department. Construction and maintenance are two distinct phases of a project. At the working level, different teams are involved in those two phases. However, both the phases are concerns for the investor. While the working team has the target of finishing the project in the allotted time, they are also aware that their company has to maintain the project for next 20-25 years, whatever the concession period is. Hence, they will be answerable for poor construction too. [Need to talk to people in construction like what do they know about the whole project? They also keep on changing firms, are they actually answerable for what happened 15 years ago?]. As the government department has the highest authority, private sector investors attempt not to raise any claim against

them, even if things are not going according to contract, and prerequisites are not met from the government side,

The second highest authority in terms of power is with the concessionaire.

Next in line is the IE. It can also be said that the concessionaire and the IE have the same authority. But then there is a power struggle between them. The concessionaire wants to take the IE into their confidence so that the IE becomes a team member and starts understanding their working logic. One should understand that while there are many people involved from the concessionaire side in the project, there are only two or three members from the IE side. It also matters who is involved from which side. Generally the head from the private sector firm is someone like an Assistant Vice Chair, while it is the project manager from the IE side. Also, they have the same academic background. Hence, as the post demands, the private sector project director is senior than the project manager from IE. Hence, the concessionaire always wants to suppress the IE. IEs need to understand that they are going to approve concessionaires' and contractors' work and it will hence become their responsibility. If issues come up later regarding design, then it becomes the IE's responsibility; if it is regarding construction, then it becomes the concessionaires' headache. [How to understand whether it's construction or design?]

Although one public sector department is the client for the private sector concessionaire, there are other public sector departments who have to directly perform certain activities. There are still differences between the ways of working of the public and private sectors. And private sector workers still find it difficult to cope with the public sector way of working. As per the contract, the concerned public sector department is supposed to internalize those externalities. However, this is not the case in practice. Also, although the contract provides room for compensation demands, the concessionaire doesn't want to take legal steps, rather they want to settle things through mutual understanding, as they have got into a relationship for the next fifteen years at the minimum. And they don't want to spoil the relationship by raising such issues at the very beginning of this. Also, as they have already invested their money, they cannot afford to spoil the relationship?



### **Field Note-03, July 2011, Ranchi, India**

12 July, 2011

Road trip from Ranchi to Hazaribagh

We left the hotel at 8:30 in the morning. I was accompanied by a friend, who has a business in Ranchi, and his colleague Ashok, who speaks the local language. We rented a car which had to be replaced near Ramgarh as the Air Conditioner wasn't working. We passed by Ramgarh, which has a colliery. The highway passes through a hilly area. This area is picturesque. One gets a beautiful view of the city from the top of the hill while driving through the road. However, one wouldn't miss the sight of loads of people carrying coals in jute bags (basta) on the back of cycles and walking through the road while dragging the cycle. As I had already seen pictures on website, I could readily recognise Kujju. As confirmed by my accompaniers, illegal mining is common here. CCL is supposed to seal the tunnel after their mining activities. But they generally don't seal this properly and just fill up the tunnel with sand and cover the openings. Hence, it is easier for local people to do illegal mining afterwards by digging the same tunnel and then sell them at the nearest local market. We also passed through the Kujju bypass, which was built after the blast from the illegal tunnel. I got pictures of the bypass. It looks like they have changed the route for quite a long stretch. The road used to go uphill and then downhill. Now they have constructed a bypass on the left of the original road and now it goes downhill and passes through two very rocky mountains. The tunnel that was the reason for fire on road, is now prominently visible. It shows how very minute fault in physical structure can exercise power over daily activities.

We first stopped at Kujju to meet XXX at CCL office who was known to the friend and promised to introduce us to someone who has lost his land for HREL project and has filed a legal case for more compensation. While they went in to talk to him, I waited in the car for half an hour outside the office. While going to this office, we had to take a side road to the interior of Kujju. Whereas the drive on the highway wasn't that bad, drive through the side road was horrible. One would feel like riding a roller coaster. However, he wasn't there and we left for another office while thinking we would come back later.

#### **Field Note-04, August 2011, Ranchi, India**

Some scenarios I came across. I felt extremely inhumane to take pictures. I have attempted to make a sketch on the basis of the picture I withheld in my memory. There are low-rise structures of very low quality but permanent material on both sides of the road. They were demolished. However, the only part that was coming in the Right Of Way was demolished. Hence, there are half-broken low-rise remaining structures on the both sides of the road with exposed brick and cement. There are bulldozers lying there, which demolish the houses. People have gathered at the site around the bulldozers. Some are curious to see how this works, some used to be property owners, who have received compensation for selling their property, willingly or unwillingly, and now they are standing there to see how their houses are being demolished. Some of them are trying to make sure that the government is not taking more than what they have paid for. Since houses are being demolished from the ground, the ground now has a rough muddy form. There are people from the road builders who are levelling the ground, preparing the land for road construction. They have happy expression on their faces, satisfied with the job they have got to do. There are people from the community lining up along the construction site. Some are curious to see how such a huge development process is taking place and some are clearly unhappy as their land was taken without their consent and now it's a funeral for them! It's a single development process that shows a pattern of 'pareto optimality'. One's resource is taken for another.

## Appendix F. List of documents

Sl no.	Name of document	Type of document and how accessed	Project	Date of publication	Location of publication	Date of access
01	Extract from Minutes of meeting on meeting between NHAI and all State Government Departments	Official document collected from NHAI office	HREL	Monthly meeting, spread over past months in 2010	Ranchi, India	August 2010
02	Executive Summary from Detail Project Report [Not attached]	Official document collected from Concessionaire Director	HREL		Ranchi, India	August 2010
03	Ramgarh bypass [Not attached]	Media report				
04	Smoke alarm on Kujju Bypass, <i>The Telegraph</i>	Online media report	HREL	16 August 2009	Kolkata, India	September 2010
05	The burning highway at Kujju (near Ramgarh)	Blog (accessed online)	HREL	06 January 2010	Kolkata, India	September 2010
06	Model Concessionaire Agreement for BOT projects [Not attached]	Online document published on NHAI website	HREL and SVB	Already available in September 2010	Kolkata, India	September 2010
07	IE report for Ranchi Ring Road project [Not attached]	Supplied by attendees while attending Committee Compliance Meeting	RRR	July 2011	Ranchi, India	August 2011

Sl no.	Name of document	Type of document and how accessed	Project	Date of publication	Location of publication	Date of access
08	Second Vivekananda Bridge, Kolkata, India	Online document on receipt of international award	SVB	2008	Kolkata, India	September 2010
09	Flaws many in the making of bridge, <i>The Telegraph</i>	Online media report	SVB	May 22, 2006	Kolkata, India	September, 2010
10	MoRTH report [Not attached]	Official document available online on MoRTH official website	HRE			
11	Detail Project Report, Hazaribagh–Ranchi Expressway Limited [Not attached]	Provided by Concessionaire Director, Ranchi, India	HREL			
12	Jharkhand: Maoists torch costly machinery of road construction company, Ranchi, India, ibnlive.in.com	Online media report	HREL and RRR	22 April 2012	Newcastle, UK	July, 2012
13	Ranchi Road Map [Not attached]	Provided by GM, NHAI	HREL			
14	Second Vivekananda Bridge Monthly O&M Report [Not attached]	Provided by IE, SVB	SVB	July 2011		August 2011

## Appendix G. Documents attached

### Document 01

#### **Data from minutes of meeting between the state government and NHAI**

One of the important meetings in the execution stage for these PPP projects is the monthly meeting between NHAI officials and the state government. Since these meetings are between government officials, it might be called a Public-Public Partnership meeting rather than a Public Private Partnership. Although these meetings are important for the project, it doesn't allow other PPP partners like the private sector concessionaire and the independent engineer team to be present. This is between the state and central government (here only NHAI) officials ensuring smooth progress of work. This meeting is called upon by the chief secretary of the state government and he is the chair of such meeting. He is the most dominant person. Although access to such meeting was restricted, minutes of meeting were accessible and unofficial talk with the authorized official from the central government organization disclosed the purpose of such meeting and power relationship of attendees.

From the network governance point of view, it is obvious that there will be mention of names such as concessionaire and IE for each project who would not be present there. This is a result of strong bureaucracy.

It is also evident that the state government wants to assure the central government that they have strong support and institutional capacity to augment progress of central government projects.

Here are some excerpts from the minutes of meeting:

*'Chief Secretary mentioned time for priority projects should be minimized. We should put ways and device to put priority project on fast track so that public at large is benefitted. Project of railways and NHAI to be accorder top priority and as such any laxity on the part of any official cannot be condoned. Once dates decided in the presence of officials concerned, they have got to be observed ...'*

*'Efforts will have towards ultimate outcome rather than procedural formalities and the reviews will be oriented accordingly ...'*

*‘... require active cooperation and support from all the stakeholders. he stressed that concerted efforts are required from all agencies concerned for successful implementation of prestigious projects such as four-laning of NH-33, the support and cooperation required to be extended by the state government towards ensuring time bound implementation and with quality. He was happy to note that NHAI and concerned state government departments and officials and other stakeholders were doing good job and hope they would continue so ...’*

List of attendees for such meetings:

Government of Jharkhand: Chief secretary; Principal secretary, Forest and Environment and Building Dept; Commissioner, North Chhotonagpur division; Secretary, road construction; Secretary, drinking water and sanitation; Secretary, revenue and land reform; PCCF, forest and environment department; Engineer-in-chief, Road construction; Special secretary, Revenue and land reform; Member (Distribution), JSEB; Chief engineer, National highway, Jharkhand; Deputy commissioner, Ranchi; Hazaribagh; East singbhum; Saraikela; Kharswan; Additional collector, Ramgarh and Ranchi; District Land Acquisition Officer; NHAI officials: Officials from Delhi; GM for state of Bihar and Jharkhand; Project Director; Project Manager.

Memos forwarded to for information and necessary action:

All attendees; Chairman (NHAI); Member (Project) NHAI; JSEB, Jharkhand/ Ranchi, Principal Secretary Revenue and Land reform dept; Forest and Environment; Personnel, administrative; Reforms and rajbhasha depts.; Engineer-in-chief, RCD; Ranchi-chief engineer (Communication); Ranchi chief engineer, national highway; Chief engineer, CDO, RCD; Superintending engineer, Road circle; National highway circle, Ranchi; Executive engineer, Ranchi ring distribution; NH division Ranchi.

Some interesting issues I came across in the minutes that reflect conflict of interest between stakeholders:

(for HREL project):

*‘... request and decision for acquisition of 45 m ROW instead of 60 m ROW in 4 villages in order to reduce large scale structure demolition without compromising road geometry ...’*

*'... valuation of land delayed by NHAI, chief secretary pushes for completion of job on time, secretary, RCD will inform chief secretary about accomplishment of aforesaid task ...'*

PCCF cum ED wasteland board Jharkhand send proposal for diversion to Principal secretary forest and environment govt of Jharkhand ..., then it is forwarded to MoEF and copy to Resident commissioner ... Resident commissioner pressurizes MoEF, secretary RCD informs Chief Secretary ...

Issues raised regarding HREL project:

1. Valuation of structure/land acquisition
2. Transfer of GM land other permission on GM land and forest clearance
3. Determination and compensation under 3(G) and its disbursement

5 August: Ramgarh bypass:

Secretary RCD informed DC Ramgarh issued NOC for 21.44 acre, while 49.81 acres left...

PCCF- 33 ha of forest land incl 20 ha junglejhari to be diverted in Ramgarh

*'Residents of Kothar objected alignment of land on the a/c of being solely used for agriculture purpose. ...'*

*Secretary of RCD and NHAI have form view that this cannot be acceded as land acquisition is in advanced stage as existing acquisition has been chosen with care and any deviation would affect process and adversely impact design objective...*

*Realigning will delay the whole procedure and contractual complication as concessionaire is already in place .... He mentioned this can be issue of compensation but not realignment ...'*

*Chief secretary directed secretary RCD and NHAI official to visit site and explain problems to residents. They need to be convinced that said alignment cannot be changed and report to chief secretary ...'*

3 July meeting:

*‘Large scale demolition of structure, the issue was how can this be avoided? NHAI visited site and said change of alignment not possible at this stage as some may lead to poor geometry.. maximum 60 m ROW can be reduced to 45 m ....’*

Excerpts from informal talk with PD regarding these meetings:

*‘... He also praised a lot about the chief secretary of Govt of Jharkhand. He said that present CS is very pro-active. He takes all the initiatives for meetings. He said, “He fixes the next meeting himself, he doesn’t ask anyone for a date.” However, from his tone it was apparent that he takes it as a positive thing and means that if the CS doesn’t do so, other departments will not take action on time and will lag on schedule. PD also mentioned that if he remains the CS for long time, there would be huge development in Jharkhand ....’*

#### **Document 04**

**The Telegraph**  
calcutta, india

**Issue Date:** Monday, August 17, 2009

#### **Smoke alarm on Kujju bypass**

AMIT GUPTA



Ranchi, Aug. 16: A 755-metre alignment proposed to bypass the underground fire that has singed and seared NH-33 near Kujju is no longer safe.

Road to peril

The alleged inability of Central Coalfields Limited (CCL) officials to gauge the exact extent of fire between Ranchi and Hazaribagh has led to the problem. It has been found that the proposed diversion, too, falls within the blaze radius. So, a fresh alignment, approximately measuring 1,200 metres, is being considered.

“Survey for the new alignment is on. By late evening or tomorrow morning we will be able to finalise the route. Prima facie it appears that the new route will measure around 1,200 metres,” said Rajesh Kumar Gupta, the executive engineer, national highway



wing (Ranchi), state road construction department.

Gupta added that CCL officials had been strictly instructed to carry out boring along the new alignment to ascertain that no underground fire was threatening this alternative route, too.

Talking to **The Telegraph**, state road construction secretary N.N. Sinha minced no words to say that CCL officials had not taken the job seriously from the very first.

“They did not tell us that illegal mining was rampant even along the bypass that has been proposed,” he said.

On August 9, the office of the executive engineer of national highway division had invited a short-notice tender. August 26 was fixed for opening documents to grant the Rs 2.33-crore project to an eligible construction firm that could complete the work within a stipulated period of two months, starting from the date the job was awarded.

Unfortunately, the tender has been rendered useless, as the authorities assume the cost of the new alignment will now be around Rs 4 crore. The two-month deadline doesn’t look feasible either.

“We may come out with a corrigendum or go for inviting tenders afresh. The matter will be decided within a day or two,” said an engineer.

Meanwhile, reports from Kujju suggest that fire had erupted from two new spots, posing a more difficult challenge for firefighters of CCL and experts from Central Mining and Fuel Research Institute (CMFRI), Dhanbad.

Fissures on the Ranchi-Patna highway began spewing a mix of carbon monoxide, carbon dioxide and sulphur dioxide as early as June 29, but the state administration and CCL authorities woke up to the smoke alarm on July 19.

First, delay in gauging the damage and, then, inept handling of the situation resulted in the cave-in of a portion of NH-33 at Lohagate a week ago.

All vehicles are currently taking a longer detour from Kujju on NH-33, considered the lifeline of Jharkhand, to travel to Patna, Calcutta, Varanasi, Kanpur and Delhi.

As far as using fire extinguishing chemicals are concerned, Sinha said CCL officials had claimed that they were injecting the same for two days now.

Central Coalfields Limited chairman-cum-managing director R.K. Saha said with the help of a machine hired from Mahanadi Coalfields Limited in Sambalpur, Orissa, they were injecting a mixture of sodium silicate, dry ammonium phosphate and nitrogen foam through holes drilled on the highway to control the blaze.

“But the magnitude of the fire is more than what we had presumed. The underground fire is still raging and the only solution now seems to be digging out the burning coal, just the way it needs to be done in Jharia,” said Saha over phone from Calcutta.

## **Document 05**

**WEDNESDAY, JANUARY 6, 2010**

### **The burning highway at Kujju (near Ramgarh)**

As everyone knows, illegal coal mining is rampant in Jharkhand and is carried out openly with total complicity of govt. officials and politicians. The illegally mined coal is always transported on bicycles because, apparently, there is no law against it!



**Coal being transported on bicycles at Chutupalu Ghat near Ramgarh**

Here is a statement (*published in The Telegraph, Jamshedpur edition, dated 06.01.10*) made by the CMD of Central Coalfields Ltd.: “*Each cycle carries 300 to 400 kg of illegally mined coal and there are an estimated 18,000 cycles carrying coal all over the state. It translates to 7,200 tonnes of illegal coal entering the markets and some sponge iron units everyday*”.



**See the quantum of coal in one bicycle!**

Illegal mining often leads to collapse of the mined cavities and major underground fires. During mid-2009, a portion of the NH33 near Ramgarh suddenly caved in and massive plumes of smoke started emanating from the fissures. Investigations revealed a huge underground coal fire. Thereafter, crores of Rupees of taxpayers’ money was spent by various govt. agencies and the fire was claimed to have been put off. However, during my recent trip to Kanpur and back I saw smoke still coming out of the fissures in the ground near Kujju (see picture below).



### **Smoke coming out of the ground adjacent to the bypass at Kujju**

As far as the NH33 is concerned, a ‘diversion’ of sorts has been made for small vehicles and heavy vehicles have to take a long detour. This diversion is about a km long and starts 15 km after Ramgarh (at a village called Kujju) when one is going towards Hazaribagh. It is completely unpaved and has some steep slopes. I have driven through this bypass several times over the last 6 months or so. Initially, it wasn’t too bad but is now becoming more treacherous because some heavy vehicles have also started using it (obviously, by bribing the police) and their wheels have cut deep furrows in the unpaved and narrow path making it more problematic for small vehicles. Erosion of the path has also deposited a thick layer of dust on the road which starts flying and creates visibility problems whenever any vehicle passes on this road.



**Thick cloud of dust creates visibility problems. Accidents are common. But who gives a damn?**

Because there was no elected government in Jharkhand for many months, many projects were on hold. Now that the people of Jharkhand have once again entrusted the ‘*governance*’ of this state to a convicted murderer, projects (including a new stretch of NH33 between Ramgarh and Hazaribagh away from the underground fire zone) should start soon because projects are one of the best ways to make money!

POSTED BY DEBASHIS MUKHERJEE AT 9:28 PM

**Document 08**

Second Vivekananda Bridge, Kolkata, India

Designed to replace the existing Vivekananda Bridge spanning the Hoogly River in Calcutta, this 880-m (2,890-ft)-long bridge forms part of a 3.8-mile (6.1-km) toll highway, with six lanes of traffic. The 29-m (95-ft)-wide structure includes seven 110-m (360-ft) spans and consists of an “extradosed” precast segmental concrete box girder built in balanced cantilever, with three mid-span expansion joints. These joints are designed to allow for horizontal movements but resist bending due to concrete creep distribution and live loads.

It is a multiple-span “extra-dosed” bridge with a central plane of stay cables. The superstructure is monolithically connected to cast-in-place pier shafts supported on 45-m (148-ft)-deep caissons or well foundations. The circular caisson caps are located at riverbed level to reduce scour.

Construction of the bridge superstructure was critical due to high current and flooding after the monsoon season. This project received the American Segmental Bridge Institute (ASBI) 2007 Bridge Award of Excellence and the CELSOC 2008 Engineering Excellence Merit Award.

**Developer:** Second Vivekananda Bridge Tollway Co.

**Contractor:** Larsen and Toubro

**General Consultant:** Consulting Engineering Services and PB Asia

**Bridge Design Consultant:** International Bridge Technologies, Inc.

## Document 09

### Flaws many in the making of bridge: Expert

OUR SPECIAL CORRESPONDENT



**Calcutta, May 21:** Jurgen Dorbecker, the German structural engineer who used to supervise the construction of the Second Vivekananda Bridge, had listed several major incidents since January in his final report.

Smashed helmets of injured workers lie amid the rubble of the bridge. The cited instances ranged from the malfunctioning of a gantry crane to missing reinforcements and the failure of a grouted joint to cracking concrete.

The report was submitted on May 12 with L&T project manager T.S. Ananthakumar. Copies of it were sent to Lala K.K. Roy, the CEO of project owners Second Vivekananda Bridge Tollway Company Private Ltd, and L&T executive vice-president J. Ganguly, among others.

Days before a portion of the bridge connecting Calcutta and Howrah caved in on Friday, Dorbecker had told **The Telegraph** that the entire structure could collapse in five to seven years.

In his final report, he wrote that the failure of the crane in the main bridge's pre-cast yard on January 5 was triggered by failed welded joints, a result of poor workmanship.

During an inspection on March 29, the resident engineer found that 84 reinforcement bars were missing in the concrete slab while comparing with the drawings.

The explanation from the on-site engineer-in-charge he was under pressure from his superiors to achieve progress.

Dorbecker also observed in his report that the steel shutter for the upper pylon is not matching with the requirements of the design drawings in dimensions.

The report says: The contractor (L&T) has been advised by SVBTC (Second Vivekananda Bridge Tollway Company) and also CES/PB (supervising engineering

agencies) that this is not acceptable and has been asked to review the entire formwork. The contractor is avoiding following instructions by SVBTC and instead, is proposing to paint the entire pylon P9 to cover up the badly repaired joints.

Dorbecker's document adds that the contractor has made no attempts to proceed with grouting and/or protection of PT bars in the already installed segments. Rust and future failure of the PT bars and PT strands can be expected.

On the failure of Joint P9 11D to 12D on April 26, which prompted a stop-work order by independent engineer Schlaich Bergermann, the report says: It has become clear after inspections by all parties that no grout had been applied in the web areas of the segment.

Dorbecker also reported a large number of cracked-up concrete portions, clearly visible from the inside of the segments, exposing the PT bar connections to moisture and consequent rusting. It is certainly not acceptable just to cover up these cracked areas as under the load of traffic, the bridge will vibrate and patch-up work will simply fall off, he warned.

The German engineer felt that quality control at the main bridge's pre-cast yard and other work areas need to be improved considerably.

Two workers died and two were seriously injured in Friday's cave-in. Labourers stopped work demanding safety measures and blaming L&T for using substandard material. They alleged that the iron rods used in the segment that crashed were of poor quality.

L&T had yesterday termed Dorbecker's allegations baseless and referred the issue to the Second Vivekananda Bridge Tollway Company. The company's chief executive officer, Roy, said the German expert had been eased out for shirking responsibility.



## Document 12

dia | Posted on Apr 22, 2012 at 11:38am IST

### **Jharkhand: Maoists torch costly machinery of road construction company**

**Giridih:** Maoists torched machinery and vehicles of a road construction company in Giridih district, police said on Sunday.

About a dozen armed rebels poured petrol on nine earth cutting machinery and tractors of the company near Dawatand village of the district last night, Superintendent of Police AV Homkar told reporters.

The SP suspected that refusal to allow extortion could be the reason behind the destruction of property by the Maoists.



The company engaged in road construction in Giridih district had lost three machines when the ultras torched them three years ago.

Chief Minister Arjun Munda, during his recent visit to Giridih to inspect conditions of road, had warned that action would be taken if road conditions were not improved in the area.



## **Appendix H. All permission letters**



To

The General Manager,  
State of Bihar and Jharkhand,  
National Highway Authority of India (NHAI), Delhi

School of Architecture, Planning  
and Landscape

Claremont Tower  
Claremont Road  
Newcastle upon Tyne  
NE1 7RU United Kingdom

Subject: Seeking permission for conducting fieldwork for a research project

Dear Sir,

I am conducting a study on Public Private Partnerships (PPP) for highway development in India with PhD- Studentship in Spatial Planning and Environment at the Newcastle University, England. My research topic is 'Understanding the relational arrangements in Public Private Partnership (PPP): A case study of highway development in India.' This study will consider projects from the eastern region of India that will be delivered in phase-III of National Highway Development Project (NHDP). I'm interested in considering Barhi-Hazaribagh project (Toll) in the state of Jharkhand, and Muzaffarpur-Patna (Bihar) / Hazaribagh-Ranchi (Jharkhand) projects (Annuity) as potential cases. I have spoken to the Project Manager of Barhi-Hazaribagh project at Ranchi. He mentioned that they would need an approval letter from your side in order to allow me to conduct the study.

In this study, I'm looking into the process of formation and execution of such partnerships while exploring relational arrangements between stakeholders. This study will use multiple methods namely content analysis, key informant interviews, expert report, diary keeping, focus group, and non-participant observation. Regarding content analysis, I will need to go through the project reports, contractual agreements, minutes of meeting, and inter-office memos.

Currently I'm in India to conduct my fieldwork and will be here until the first week of November 2010. The School Panel in the university has approved this research proposal. I do understand that I will access confidential information and assure that it will be used for the academic purpose only. I assure that participants will be informed about their involvement in the study and data will be collected with their knowledge and consent only. I also ensure that data will be used anonymously to ensure the confidentiality of the interviewee. I will be grateful if you permit me conducting this fieldwork while allowing me to access the relevant documents, interview concerned persons and communities and attend necessary meetings. It will be also helpful if I'm allowed to take notes, voice record interviews and meetings, take pictures, make photocopy of reports in order to complete the data collection. Audio records will be used in order to precisely capture data only and will be destroyed after transcription.

Thanking you

*Chandrima Mukhopadhyay*  
Chandrima Mukhopadhyay

PhD Research Candidate

School of Architecture and Planning, Newcastle University, England

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( सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार )  
**National Highways Authority of India**  
( Ministry of Road Transport and Highways, Govt. of India )

Office of the Project Director  
Project Implementation Unit Ranchi  
C-76, Harmu Housing Colony  
Near Swami Sahjanand Chowk  
Ranchi (Jharkhand)-834 012  
Ph./Fax : 0651-2245293  
e-mail : ranchi@nhai.org

Ref: NHAI/PIU/PD/RNC/186

August 23, 2010

To,  
M/s Unihorn India Pvt. Ltd,  
Vatika Atrium, B-Block,  
1<sup>st</sup> floor, DLF Golf Course Road,  
Sector 53, Gurgaon – 122 002

**Sub: Seeking permission for conducting fieldwork for a research project.**

Ref: NHAI, HQ letter no. NHAI/Bihar/Misc./2010/CM/13564 dated 20.08.10

Sir,

Kindly refer the letter mentioned above vide which NHAI, HQ has requested to provide information to Ms. Chandrima Mukhopadhyay for conducting fieldwork for a research project as admissible under Right to Information Act. Therefore, you are requested to do the needful.

Thanking you,

Yours faithfully,

Project Director,  
PIU, Ranchi

Copy to:

- (i) Sri Rajnish Saxena, Project Director, M/s Hazaribag Ranchi Expressway Ltd., 443/A, Ashok Nagar – for information please.
- (ii) Ms. Chandrima Mukhopadhyay, PhD Research Candidate, School of Architecture and Planning, Newcastle University, England – for information please.

Project Director,  
PIU, Ranchi

Received through mail on

22/8/10



## भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन और राजमार्ग मंत्रालय)

## National Highways Authority of India

(Ministry of Road Transport and Highways)

जी-5 एवं 6, सेक्टर-10, द्वारका, नई दिल्ली - 110 075

G-5 & 6, Sector-10, Dwarka, New Delhi-110075

दूरभाष / Phone: 91-11-25074100/25074200

फैक्स / Fax: 91-11-25093507 / 25093514

एक्स. / Extn.: 2223 / 2318 / 2468 / 2553

NHAI/Bihar/Misc./2010/CM/13564

Dated: 20.08.2010

To,

Project Director  
National Highways Authority of India  
Project Implementation Unit, Hajipur  
12, Rajput Nagar  
Hajipur-844107  
E-mail- [hajipur@nhai.org](mailto:hajipur@nhai.org)  
Tel:- 06224-27455  
Fax:- 06224-274256

Project Director  
NHAI, PIU  
C-76, Harmoo Housing Colony  
Near Sahjanand Chowk  
Ranchi  
Fax : 0651-2245293  
Email: [ranchi@nhai.org](mailto:ranchi@nhai.org)

**Sub: Seeking permission for conducting fieldwork for a research project**

Please refer to letter dated 12<sup>th</sup> May, 2010 received from Ms. Chandrima Mukhopadhyay regarding the subject matter. In this regard, you are requested to provide the information to the applicant as admissible under Right of Information Act.

(A. Srivastava)

General Manager (T) BH&JH

Encl: As above

Copy to : Ms. Chandrima Mukhopadhyay  
[Chandrima.mukhopadhyay@ncl.ac.uk](mailto:Chandrima.mukhopadhyay@ncl.ac.uk)

GOVERNMENT OF JHARKHAND

ROAD CONSTRUCTION DEPARTMENT

Letter No : प0नि0वि0 / विविध 6-131 / 2007 5203(S) Dated: 13/9/10

From,

N. N. Sinha,  
Secretary

To,

Ms. Chandrima Mukhopadhyay,  
PhD Research Candidate,  
School of Architecture and Planning,  
Newcastle University,  
Claremont Tower, Claremont Road,  
Newcastle upon Tyne,  
NE1 7RU, United Kingdom

**Subject:** Permission for conducting fieldwork for a research project on "Understanding the relational arrangements in Public Private Partnership (PPP) : A case study of highway development in India" for two ongoing work taken up under Public Private Partnership by State Govt, reg.

**Ref. :** Your letter no. NIL dated 02.9.2010

Sir


With reference to above mention subject, this is to intimate that Road Construction Department (RCD), Govt. of Jharkhand has taken up development of (i) Section- III, IV, V & VI of Ranchi Ring Road and (ii) Ranchi -Partatu Dam-Ramgarh Road under Jharkhand Accelerated Road Development Programme (JARDP) through Public Private Partnership (PPP). It is being developed by a Special Purpose Vehicle (SPV) Jharkhand Accelerated Road Development Co. Ltd. (JARDCL), a Joint venture of Govt. of Jharkhand and IL&FS Co. Ltd., Mumbai

As requested vide your above-referred letter, you are permitted to conduct the said fieldwork from 13.9.2010 to 04.11.2010. As requested, you are permitted to go through the Detailed Project Report, contractual agreements, minutes of meetings and inter office memos for your academic purpose. You are, thus, allowed to have access to relevant documents, take necessary notes, interview and voice record concerned persons and communities, take pictures, attend necessary meetings and make photocopies.

Audio records must be destroyed after transcription and all the data and records must kept confidential and shall be used for academic purpose only.

Sri S.K. Mingalani, Asst. Vice President, IL&FS C/o JARDCL is being requested to help you in conducting your fieldwork.

Yours sincerely,

  
10/9/2010  
(N. N. Sinha)  
Secretary



GOVERNMENT OF JHARKHAND

ROAD CONSTRUCTION DEPARTMENT

Letter No : प०नि०वि० / विविध 6-131 / 2007 5203(S)

Dated: 13/9/10

From,

N. N. Sinha,  
Secretary

To,

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PhD Research Candidate,  
School of Architecture and Planning,  
Newcastle University,  
Claremont Tower, Claremont Road,  
Newcastle upon Tyne,  
NE1 7RU, United Kingdom

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Audio records must be destroyed after transcription and all the data and records must kept confidential and shall be used for academic purpose only.

Sri S.K. Mingalani, Asst. Vice President, IL&FS C/o JARDCL is being requested to help you in conducting your fieldwork.

Yours sincerely,

*N.N. Sinha*  
16/9/2010  
(N. N. Sinha)  
Secretary



भारतीय राष्ट्रीय राजमार्ग प्राधिकरण  
( सड़क परिवहन और राजमार्ग मंत्रालय )  
**National Highways Authority of India**  
(Ministry of Road Transport and Highways)

टेल/Tel : (033) 2226 8130 (EPBAX)  
(033) 2226 8131 (DIRECT)  
फैक्स /Fax : (033) 2226 8132  
ईमेल/E-mail: piukol@gmail.com  
: kol@nhai.org

परियोजना निदेशक का कार्यालय  
Office of the Project Director  
परियोजना कार्यान्वयन इकाई  
Project Implementation Unit  
दुसरा तल्ला, ए ब्लॉक, व्हाइट हाउस  
2nd Floor, A Block, White House  
119, पार्क स्ट्रीट, कोलकाता - 700 016  
119, Park Street, Kolkata - 700 016

संदर्भ/Ref. No.....

दिनांक / Dated.....

NHAI/PIU-KOL/SVB/General/ 1063

08.08.2011

To

Shri L.K.K. Roy,  
Chief Executive Officer,  
Second Vivekananda Bridge Toll Co. Pvt. Ltd.  
Infinity Building, Block – GP,  
Salt Lake, Sector-V, Kolkata – 700-091

**Sub: Extend co-operation to Ms. Chandrima Mukhopadhyay for her study/research on PPP for highway development.**

Sir,

As desired by Ms. Mukhopadhyay vide her letter dated 08.08.2011 (copy enclosed) and in reference to the detailed discussion over telephone, it is requested to extend your help/co-operation for her research work.

Thanking you,

Encl: As stated.

Yours faithfully,

(Anil Dixit)  
Project Director

Copy to: -

- 1) Shri S. Dasgupta, Sr. Bridge Engineer, M/s. Louis Berger Consulting (P) Ltd., Bikas – Priti House, (Ground Floor), CD-38, Sector -1, Salt Lake City, Kolkata – 700-064 – it is requested to extend help/co-operation to give a few information which can be safely provided to Ms. Chandrima Mukhopadhyay for her study.
- ✓ 2) Ms. Chandrima Mukhopadhyay, Research Student, Salt Lake, Kolkata.

Desktop. Ranjan Letter 7

Corporate Office : G-5 & 6 Sector - 10, Dwarka, New Delhi – 110 075  
● Fax : 91-11-25074100 / 25074200 ● Website : <http://www.nhai.org>

16 June 2011

To Whom It May Concern:

**Ms Chandrima Mukhopadhyay**

I am the joint academic supervisor of Ms Mukhopadhyay who has been registered as a full time PhD student within the School of Architecture, Planning and Landscape at Newcastle University since October 2009. She is due to complete in September 2013.

Ms Mukhopadhyay is carrying out research on Understanding the Relational Arrangements in Public Private Partnership (PPP), and the case study is on highway development in India. She will be travelling to India from end of June to end of August 2011 to undertake data collection necessary for her research. I would be very grateful if all the relevant institutions that Ms Mukhopadhyay visits would be able to offer all the necessary assistance to facilitate this work.

If you have any queries, please contact me.

Yours sincerely



**Professor Simin Davoudi**  
PhD Supervisor  
Simin.Davoudi@ncl.ac.uk  
0191 246 4884

tel :+44 (0) 191 222 5831  
switchboard :+44 (0) 191 222 6000  
fax :+44 (0) 191 222 8811

[www.ncl.ac.uk](http://www.ncl.ac.uk)

The University of Newcastle upon Tyne trading as Newcastle University



**THE QUEEN'S  
ANNIVERSARY PRIZES**  
FOR HIGHER AND FURTHER EDUCATION

**2009**



## Declaration Form

Chandrima Mukhopadhyay  
PhD Candidate, School of Architecture, Planning  
and Landscape,  
Newcastle University, UK  
Email: [chandrima.mukhopadhyay@ncl.ac.uk](mailto:chandrima.mukhopadhyay@ncl.ac.uk)

As a PhD candidate in the School of Architecture, Planning and Landscape, Newcastle University, UK, I am conducting a research on "Relational arrangements in Public Private Partnerships (PPPs): A case study on the highway development in India." As a part of the research, I'm conducting a survey amongst the local communities who have been either affected or are located in proximity to the concerned project.

Thank you for taking part in this study. Your participation in the survey will be used for academic purposes ONLY and in the dissemination of research related to the study introduced above. However, all participants in this experiment will be anonymous to respect the confidentiality of data.

You should also understand that participation is entirely voluntary and you can withdraw from participating at anytime without any consequences.

If you have any question, please contact me on the email provided. My contact address in India is as follows:

FC-1, Sector-III,  
Salt Lake, Kolkata-700106,  
West Bengal, India

---

## Online RTI Request Form Details

### Public Authority Details :-

Public Authority	National Highways Authority of India (NHAI)
------------------	---

### Personal Details of RTI Applicant:-

Name	Chandrima Mukhopadhyay
Gender	Female
Address	FC-1, Sector-III, Saltlake
Pincode	700106
Country	India
State	West Bengal
Status	Urban
Educational Status	Literate
	Above Graduate
Phone Number	Details not provided
Mobile Number	+91-8930110830
Email-ID	chandrimamukho[at]gmail[dot]com

### Request Details :-

Citizenship	Indian
Is the Requester Below Poverty Line ?	No

(Description of Information sought (upto 500 characters))

Description of Information Sought	
	<p>Following documents for both Hazaribagh Ranchl Expressway widening project and Second Vivekananda Bridge</p> <p>Basic Policy Document</p> <p>Draft Performance Specification Report</p> <p>Pre-feasibility study</p> <p>Consultation documents</p> <p>Final Performance Specification Documents</p> <p>Decision documents</p> <p>Information document</p>
Concerned CPIO	Anup Purkayastha
Supporting document (only pdf upto 1 MB)	Supporting document not provided

Remarks: **Details of CPIO:-** Telephone Number:- 25074100, Email Id:- apurkayastha@nhai.org

Note :- You are advised to contact the above mentioned officer for further details.

---

**NHAIN/R/2014/60081**

1 message

---

**Chandrima** <chandrimamukho@gmail.com>  
To: apurkayastha@nhai.org

Wed, May 7, 2014 at 4:49 PM

Dear Sir,

I have requested for the following documents through RTI online with registered no. NHAIN/R/2014/60081. Following documents for both Hazaribagh Ranchi Expressway widening project and Second Vivekananda Bridge:

- Basic Policy Document
- Draft Performance Specification Report
- Pre-feasibility study
- Consultation documents
- Final Performance Specification Documents
- Decision documents
- Information document

On the status, it shows that the request has been transferred to you and I'm advised to contact you. May I know how to proceed in this matter?

Thanks

Chandrima Mukhopadhyay

Government of India  
Ministry of Road Transport & Highways  
(P-3 Section)

RTI MATTER  
MOST IMMEDIATE

F.No.RW/NH/34014/15/2013/BR/P-3

Date 5.6.2014

To

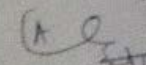
The Chief Engineer(NH),  
RCD, Engineer's hostel,  
HEC Campus  
Dhurwa,  
Ranchi Jharkhand 834004.

Subject: Application under the Right to Information Act, 2005 from Ms. Chandrima Mukhopadhyaya (Registration No. MORTH/R/2014/80098 DATED 28.5.2014)

Sir,

An application dated 28.5.2014, received from Ms. Chandrima Mukhopadhyaya is transferred herewith under Section 6 (3) under the Right to Information Act, 2005 for necessary action with the request that the requisite information may be provided directly to the applicant in accordance with the relevant provisions and time frame as stipulated under the RTI Act, 2005.

Yours faithfully

  
(Akhil Khare)

Superintending Engineer & CPIC

Encl: as above.

Copy to:-

1. Ms. Chandrima Mukhopadhyay, Resident of FC-1, Sector III, Salt Lake, West Bengal, P 700106, with reference to her above referred RTI application. Your application has been transferred to the addressee. You may approach on the above mentioned address in the regard.

2. RTI Section MoRTH.

## Online RTI Request Form Details

### Public Authority Details :-

* Public Authority	Department of Revenue
--------------------	-----------------------

### Personal Details of RTI Applicant:-

* Name	Chandrima Mukhopadhyay
Gender	Female
* Address	FC-1, Sector-III , Saltlake
Pincode	700106
Country	India
State	West Bengal
Status	Urban
Educational Status	Literate
	Above Graduate
Phone Number	Details not provided
Mobile Number	+91-8930110830
Email-ID	chandrimamukho[at]gmail[dot]com

### Request Details :-

Citizenship	Indian
* Is the Requester Below Poverty Line ?	No

(Description of Information sought (upto 500 characters))

* Description of Information Sought	
	<p>I am seeking information on basis for compensation in case of land acquisition for highway projects specifically for the following cases</p> <p>Hazaribagh Ranchi Expressway widening project</p> <p>Ranchi Ring Road (Green expressway under State Govt Road Construction Dept)</p> <p>Second Vivekananda Bridge</p>
* Concerned CPIO	Nodal Officer
Supporting document (only pdf upto 1 MB)	Supporting document not provided

Remarks :- As mentioned in the guidelines for use of this portal, this facility is not available for filing RTI applications for the public authorities under the State Governments, including Government of NCT Delhi. Since your RTI application is meant for a public authority under the State Government, the same is returned herewith. You may file the same before the concerned public authority under the State Government.

## Online RTI Request Form Details

### Public Authority Details :-

Public Authority	Ministry of Road Transport & Highways
------------------	---------------------------------------

### Personal Details of RTI Applicant:-

Name	Chandrima Mukhopadhyay
Gender	Female
Address	FC-1, Sector-III, Saltlake
Pincode	700106
Country	India
State	West Bengal
Status	Urban
Educational Status	Literate
	Above Graduate
Phone Number	Details not provided
Mobile Number	+91-8930110830
Email-ID	chandrimamukho[at]gmail[dot]com

### Request Details :-

Citizenship	Indian
Is the Requester Below Poverty Line ?	No

(Description of Information sought (upto 500 characters))

Description of Information Sought	
	<p>Following documents for Ranchi Ring Road</p> <p>Basic Policy Document</p> <p>Draft Performance Specification Report</p> <p>Pre-feasibility study</p> <p>Consultation documents</p> <p>Final Performance Specification document</p> <p>Decision document</p> <p>Information Document</p>
Concerned CPIO	AKHIL KHARE
Supporting document (only pdf upto 1 MB)	Supporting document not provided

Reply: - The above work is being developed by National Highways Authority of India (NHAI). Hence information may be sought from NHAI.

**Appendix I: Letters related to land acquisition collected during  
fieldwork**



राँची समाहरणालय  
(भू-अर्जन शाखा)  
ऐक्ट 1, 1894 की धारा 12 (2) के अधीन  
'सूचना'

स्थान राँची  
दिनांक 24/6/2009

संख्या 7(1)/एल.ए./200

भू अर्जन वाद संख्या - 42/05-06 /  
ग्राम - कोचबोंडा अंचल - नामकुम  
पंचायती का नाम - जगमोहन बड़ाईक व दिलीप बड़ाईक व स्व० हरि बड़ाईक  
पंचाट का संख्या - 19

बजरिये इस नोटिस के द्वारा आपको सूचना दी जाती है कि ग्राम - कोचबोंडा  
थाना नं० - 306 थाना - नामकुम राँची में जो भूमि राँची  
रिंग रोड परियोजना से ग्राम के लिए अर्जित की गई है, उसके पंचाटियों की  
राशि का भुगतान अधोहस्ताक्षरी के कार्यालय में दिनांक / / 200 को दिया जायेगा। अतः  
आपलोग उपस्थित होकर मुआवजा राशि प्राप्त करें। यदि मूल पंचायती की मृत्यु हो गयी हो तो अपने साथ  
उत्तराधिकारी प्रमाण-पत्र और संबंधित भूमि का पत्र, तीन वर्षों की मालगुजारी रसीद अवश्य लाव, ताकि  
छानबीन कर भुगतान की कार्रवाई की जा सके।

अतः अधोहस्ताक्षरी के कार्यालय में दिनांक / / 200 को निश्चित रूप से उपस्थित हो  
पंचाटित राशि मो० 26,15,544 = 00 रूपये प्राप्त कर लें। यदि  
इस तिथि को उपस्थित नहीं हो सके तो आपको ब्याज राशि देय नहीं होगी और पंचाटित राशि  
राजस्वशीर्ष में कोषागार में जमा कर दिया जायेगा।

रैयत का नाम	खाता नं०	प्लॉट नं०	रकबा
जगमोहन बड़ाईक	88	292 ✓	0.48 ए
व दिलीप बड़ाईक		293 ✓	0.10
व स्व० हरि बड़ाईक		378	0.18
		379	0.13
		676	0.18

A sample letter notifying intention of land acquisition and amount of compensation for Ranchi Ring Road

Source: Collected from a key informant



कार्यालय, जिला भू-अर्जन पदाधिकारी, रामगढ़

नोटिस, Suresh Thakur S/o Late Rohan Lal Thakur मुकदमा सं० : 02/10-11

पंचाट सं० : (55)

रामगढ़ बाईपास निर्माण कार्य हेतु ग्राम Murba, थाना नं० 155  
थाना Mandu में कुल रकवा 0.01 एकड़ भूमि अधिग्रहित है। जिसके मुआवजा भुगतान हेतु  
दिनांक 09/04/2011 को आपको मुआवजा राशि प्राप्त करने हेतु NH Act. की धारा 3(G) का नोटिस  
निर्गत किया गया है, परन्तु आपके द्वारा अभी तक मुआवजा राशि प्राप्त नहीं किया गया है।

पुनः आपको सूचित किया जाता है कि निम्न वर्णित खाता खेसरा की मुआवजा राशि  
₹ 512,90/- रुपये का चेक, समाहरणालय,  
रामगढ़ में दिनांक 29/08/11 को 11 बजे सभी आवश्यक कागजातों के साथ उपस्थित होकर  
प्राप्त कर लें। अन्यथा आपके मुआवजा राशि को आर०/डी० में जमा कर दिया जाएगा।

प्लॉट सं०

रकवा

833

0.01

अ.

जिला भू-अर्जन पदाधिकारी,  
रामगढ़।

Mangt-Bhu-A-2011-C-80

A sample letter notifying intention of land acquisition for Hazaribagh–Ranchi Expressway widening project under National Highways Act and amount of compensation to be collected by a specific date

Source: Collected from a key informant

## उपायुक्त का कार्यालय, रामगढ़

(भू-अर्जन)

नोटिस

मुंझी खाव पिता गव्वर खाव

बजरीये इस नोटिस के द्वारा सूचित किया जाता है कि मौजा माण्डू थाना नं० 114, थाना माण्डू में एन० एच० 33 के 4/6 लेनिंग हेतु खाता नं० ..... प्लॉट नं० 1007-..... पर अवस्थित संरचना का भुगतान भारतीय राष्ट्रीय राजमार्ग प्राधिकरण द्वारा किया जा चुका है।

अतएव आपको निर्देश दिया जाता है कि 15/05/2011 तक संरचना को हटा ले अन्यथा बल पूर्वक हटा दिया जाएगा।



सक्षम पदाधिकारी  
सं०

जिला भू० अ० पदा०  
रामगढ़

A sample letter notifying land has been identified and acquired for the project of Hazaribagh-Ranchi Expressway widening project and hence requesting evacuation by a specific date.

Source: Collected from a key informant

**The National Highways Act - 1956 के अधिन**

**मुआवजा संबंधी नोटिश**

(NH. Act.- 1956 के अधिन सूचना प्रपत्र फार्म)

परियोजना (प्रोजेक्ट : NH-33 के 4/6 लेनिंग रास्ता,  
बाईपाल)

मुकदमा नं० ०१/०१-१०

सेवा में,

Munpi Sao

s/o Gabbar Sao

Mandla

Award no:- 5(15)

इसके द्वारा सूचना दी जाती है कि उपरोक्त मुकदमें में जिसमें आपको सम्बद्ध व्यक्ति समझा गया है, मैंने तारीख 31/03/11 NH Act की धारा 3(G) की अधिन परिनिर्णय किया है कि आपको 291201=60 रुपये दिया जाना चाहिए। यदि आपको लेना मंजूर हो तो आप स्वयं या नियमानुसार अधिकार प्राप्त अभिकर्ता (एजेंट) के जरिये, 20/04/11 को या इसके पहले मेरे सामने उपस्थित हो। यदि आप उपस्थित नहीं हो सकें, तो आपको ब्याज नहीं दिया जाएगा।

आप अपने भुगतान के लिए जमीन संबंधित कागजात शपथ पत्र, बंध पत्र, फोटो एवं पहचान के लिए चौकीदार या सरकारी कर्मचारी अपने साथ लेकर आवें। खतियानी भूमि का बंशावली साथ लाएँ।

Plot

1007

Area

Structure

सक्षम पदाधिकारी

—सह—

जिला भू-अर्जन पदाधिकारी,  
रामगढ़।

A sample letter notifying identification of land for acquisition for widening of road near Ramgarh for Hazaribagh-Ranchi Expressway project with amount of compensation to be withdrawn by specific date

Source: collected from key informant

रांची, मंगलवार, 4 जनवरी, 2011, 11

सम्बद्ध व्यक्ति	796	निजी	टांड II	0.54	2185.350	(1) गणेशी देवी पति स्व नासायण ठाकुर (2) परमेश्वर ठाकुर पिता स्व बुक्कू ठाकुर (3) रघुनन्दन राय पिता स्व मुनेश्वर हजाम (4) लाखी देवी पति रघुनन्दन राम
महतो, नागेश्वर महतो	797	निजी	टांड II	0.28	1133.144	(1) हरीहर अजेरीय पिता पांनू अजेरीय (2) फूल कुारी देवी पति राम अजेरीय (3) अघना अजेरीय, बाल चन्दा अजेरीय (4) करण अजेरीय पिता दसाई अजेरीय (5) मो मुन्दरी देवी पति माधव अजेरीय, हरीहर अजेरीय
महतो, नागेश्वर महतो	802	निजी	टांड II	0.13	526.103	(1) भिखनी देवी पति रोहनलाल (2) तुलसी ठाकुर पिता स्व तारो ठाकुर (3) तुलसी ठाकुर पिता स्व तारो ठाकुर (4) मंजु देवी पति नेटलाल ठाकुर
महतो, नागेश्वर महतो	803	निजी	टांड II	0.02	80.939	मंजु देवी पति नेटलाल ठाकुर
महतो, नागेश्वर महतो	820	निजी	टांड I	0.11	445.164	(1) सुखदेव प्रसाद सोनी पिता स्व विष्णु साव (2) धर्मनाथ महतो, दशरथ महतो, दालचन्द महतो, सेवलाल महतो पिता बाबुलाल महतो
महतो, नागेश्वर महतो	821	निजी	टांड I	0.33	1335.492	(1) बाबू देवी पति तपेश्वर महतो (2) झानू देवी पति सहदेव महतो
हेनलता महता, इलाय	825	निजी	टांड I	0.23	930.797	(1) पाचु महतो पिता वैदेही महतो (2) परमेश्वर महतो, रामेश महतो, राजदेव महतो पिता महीला महतो (3) रामनी देवी पति स्व. भितुकुशारी महतो
महतो, नागेश्वर महतो	826	निजी	टांड I	0.14	586.572	(1) सोमा देवी पति जतरन महतो (2) परमेश्वर महतो, रामदेव महतो, राजदेव महतो पिता महीला महतो
महतो, नागेश्वर महतो	827	निजी	परती कदीम	0.08	323.756	(1) शौभा देवी पति जतरन महतो (2) परमेश्वर महतो, रामदेव महतो, राजदेव महतो पिता महीला महतो
महतो, नागेश्वर महतो	828	निजी	टांड I	0.17	687.981	नाथु महतो पिता शिश टडल महतो, धर्मनाथ महतो, दशरथ महतो, दालचन्द महतो, सेवलाल महतो पिता बाबुलाल महतो
महतो, नागेश्वर महतो	829	निजी	टांड I	0.18	728.450	(1) अरुण प्रसाद गुप्ता पिता स्व वृजु साव (2) शंकर प्रसाद गुप्ता, अबलू प्रसाद गुप्ता पिता वृजु साव
महतो, नागेश्वर महतो	830	निजी	खतीयान	0.03	121.408	झेदी ठाकुर पिता स्व गरीब ठाकुर
महतो, नागेश्वर महतो	831	निजी	मकान सहन	0.07	283.286	(1) झेदी ठाकुर पिता स्व गरीब ठाकुर (2) मंजु देवी पति नेटलाल ठाकुर (3) राजेश ठाकुर पिता गुडन ठाकुर
महतो, नागेश्वर महतो	833	निजी	परती कदीम	0.01	40.469	सुरेश ठाकुर पति स्व रोहन लाल ठाकुर
महतो, नागेश्वर महतो	834	निजी	टांड I	1.10	4451.639	(1) सुरेश ठाकुर पिता स्व रोहन लाल ठाकुर (2) मदन गोपाल पिता बासदेव राम मोदी (3) रतन प्रसाद पिता स्व साव (4) रजनी देवी पिता परमेश्वर ठाकुर, गणेशी देवी पति नारायण ठाकुर (5) नरेश ठाकुर, पिता तुलसी ठाकुर (6) लोकनाथ ठाकुर, कौलेश्वर ठाकुर, कालेश्वर ठाकुर पिता झेदी ठाकुर (7) रेशमी देवी शिबु ठाकुर (8) लाखी देवी पति रघुनन्दन ठाकुर (9) मंजु देवी पति नेटलाल ठाकुर (10) राजेश ठाकुर, राजकुमार ठाकुर पति ठाकुर (11) राजु देवी पति बेचन ठाकुर (12) सुरेश ठाकुर पिता स्व रोहन लाल ठाकुर (13) भिखनी देवी पति स्व रोहनलाल ठाकुर (14) चन्द्रा ठाकुर, बासदेव ठाकुर पिता स्व चिन्तामन ठाकुर
महतो, नागेश्वर महतो	844	निजी	टांड II	1.01	4087.414	
महतो, नागेश्वर महतो	845	निजी	टांड II	0.91	3682.720	
महतो, नागेश्वर महतो	846	निजी	टांड II	1.02	4127.883	(1) सुखदेव प्रसाद सोनी पिता स्व विष्णु साव (2) धर्मनाथ महतो, दशरथ महतो, दालचन्द महतो, सेवलाल महतो पिता बाबुलाल महतो (3) बाबू देवी पति तपेश्वर महतो (4) जानू देवी पति सहदेव महतो
महतो, नागेश्वर महतो	847	निजी	टांड II	0.19	768.019	सुखदेव प्रसाद सोनी पिता स्व विष्णु साव

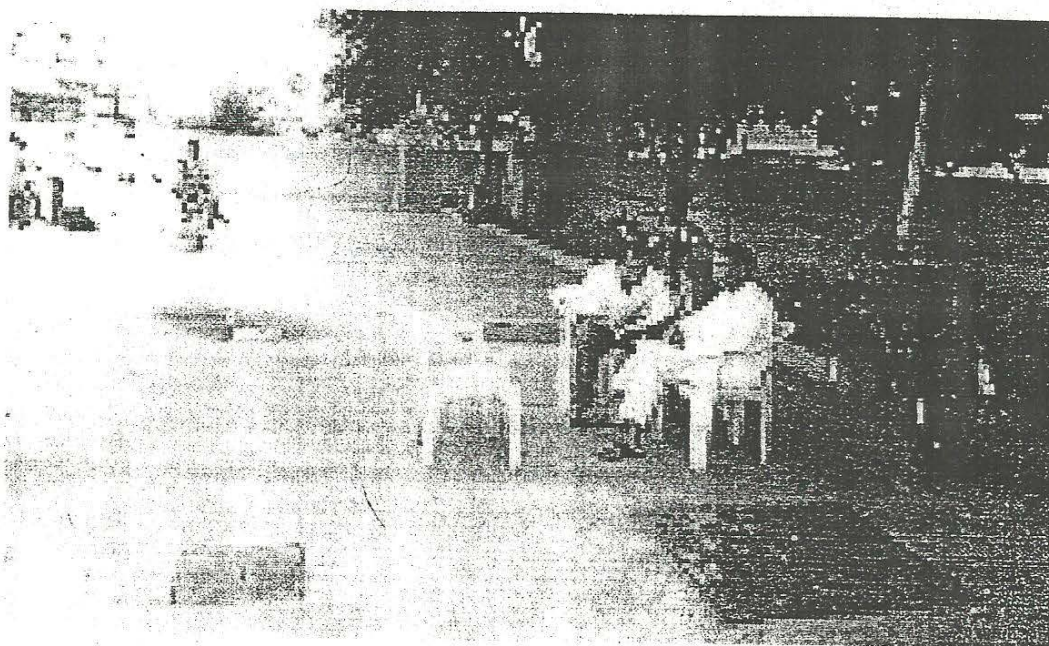
Public notification of land identified for acquisition for highway projects

Source: Collected from key informant





**Fig 9.2: Details of public consultations**



**Fig 9.3 Details of public consultations**

Image from a Detail Project Report showing evidence of public consultation (stakeholder involvement) during project planning

Source: Detail Project Report, Hazaribagh–Ranchi Expressway project

## **Bibliography**

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- 3iNetwork (ed.) (2008) *India Infrastructure Report 2008: Business Models of the Future*. New Delhi: Oxford University Press.
- Akintoye, A. (2009) 'PPPs for physical infrastructure in Developing Countries', *Policy, Finance & Management for Public -Private Partnerships*, pp. 123-144.
- Akintoye, A., Taylor, C. and Fitzgerald, E. (1998) 'Risk analysis and management of private finance initiative projects', *Engineering, Construction and Architectural Management*, 5(1), pp. 9-21.
- Albrechts, L. (2003). Planning and power: towards an emancipatory planning approach. *Environment and Planning C*, 21(6), pp. 905-924.
- Alonso-Conde, A.B., Brown, C. and Rojo-Suarez, J. (2007) 'Public private partnerships: Incentives, risk transfer and real options', *Review of Financial Economics*, 16(4), pp. 335-349.
- Anant, T. and Singh, R. (2010) 'Distribution of Highways Public Private Partnerships in India: Key legal and economic determinants'. *Center on Democracy, Development, and the Rule of Law Working Papers* 100 (2009).
- Archer, M.S., Bhaskar, R., Collier, A., Lawson, T. and Norrie, A. (eds.) (1998) *Critical realism: Essential readings*. Abingdon: Routledge.
- Ascher, W. (1978) *Forecasting: an appraisal for policy makers and planners*. Baltimore: Johns Hopkins University Press.
- Auriol, E. and Picard, P.M. (2009) 'Infrastructure and public utilities privatization in developing countries', *The World Bank Economic Review*, 23(1), p. 77.
- Aziz, A.M.A. (2007) 'Successful delivery of public-private partnerships for infrastructure development', *Journal of Construction Engineering and Management-Asce*, 133, pp. 918-931.
- Baindur, V. and Kamath, L. (2009) 'Reengineering urban infrastructure: how the World Bank and Asian Development Bank shape urban infrastructure finance and governance in India', Research Report, Bank Information Center, New Delhi, August.
- Bakri, A.S., Ingirige, M.J.B. and Amaratunga, R.D.G. (2010) 'Key issues for implementing knowledge management in relational contracting project settings'. in CIB

2010, 10th–13th May 2010, University of Salford. Available at: <http://usir.salford.ac.uk/9766/> accessed 1 August 2014.

Bank, T.W. (2008) *Reducing Fiduciary Risk through Increased Transparency and Accountability*. Delhi, India.

Barriball, K.L. and While, A. (1994) 'Collecting data using a semi-structured interview: a discussion paper', *Journal of Advanced Nursing*, 19(2), pp. 328-335.

Beauregard, R.A. (1998) '4 Public-Private Partnerships as Historical Chameleons: The Case of the United States', *Partnerships in Urban Governance: European and American Experience*, p. 52.

Bebchuk, L.A. and Fried, J.M. (2003) *Executive compensation as an agency problem*.

Behn, R.D. and Kant, P.A. (1999) 'Strategies for avoiding the pitfalls of performance contracting', *Public Productivity & Management Review*, 22(4), pp. 470-489.

Bing, L., Akintoye, A., Edwards, P.J. and Hardcastle, C. (2005) 'The allocation of risk in PPP/PFI construction projects in the UK', *International Journal of Project Management*, 23(1), pp. 25-35.

Blanton, T. (2002) 'The world's right to know', *Foreign Policy*, 131, pp. 50-58.

Bogason, P. and Zølner, M. (2007) *Methods in democratic network governance*. Basingstoke: Palgrave Macmillan.

Bookman, Z. and Guerrero Amparán, J.P. (2009) 'Two Steps Forward, One Step Back: Assessing the Implementation of Mexico's Freedom of Information Act', *Mexican Law Review*, 1(2), p. 1.

Bordignon, M. and Minelli, E. (2001) 'Rules transparency and political accountability', *Journal of Public Economics*, 80(1), pp. 73-98.

Bovaird, T. (2004) 'Public-private partnerships: From contested concepts to prevalent practice', *International Review of Administrative Sciences*, 70(2), pp. 199-215.

Braadbaart, O., Zhang, M.S. and Wang, Y. (2009) 'Managing urban wastewater in China: a survey of build-operate-transfer contracts', *Water and Environment Journal*, 23(1), pp. 46-51.



- Brandão, L.E.T. and Saraiva, E.C.G. (2007) 'Private risk in public infrastructure: A quantitative risk analysis as a contract modeling tool (Risco privado em infra-estrutura pública: Uma análise quantitativa de risco como ferramenta de modelagem de contratos)', *Revista de Administração Pública*, 41(6), pp. 1035-1067.
- Bruzelius, N., Flyvbjerg, B. and Rothengatter, W. (2002) 'Big decisions, big risks. Improving accountability in mega projects', *Transport Policy*, 9(2), pp. 143-154.
- Burger, P. and Hawkesworth, I. (2011). How to attain value for money: comparing PPP and traditional infrastructure public procurement. *OECD Journal on Budgeting*, 2011(1).
- Caiden, G.E. (2007) 'Corruption and governance', in Richter, W.L. and Burke, F. (eds.) *Combating Corruption, Encouraging Ethics: A Practical Guide to Management Ethics*. Second edn. Maryland: Rowman and Littlefield, p. 78.
- Caiden, G.E., Dwivedi, O.P. and Jabbra, J.G. (2001) *Where corruption lives*. Bloomfield, CT: Kumarian.
- Cao, Y.B. and Zhang, L.Y. (2008) 'The allocation of risk in PPP construction projects', *Proceedings of the Second International Conference on Management Science and Engineering Management*, pp. 285-292.
- Cernea, M.M. (1988) *Involuntary Resettlement in Development Projects: Policy Guidelines in World Bank-Financed Projects*. Washington DC.
- Chan, A.P.C., Chan, D.W.M., Chiang, Y.H., Tang, B.S., Chan, E.H.W. and Ho, K.S.K. (2004) 'Exploring critical success factors for partnering in construction projects', *Journal of Construction Engineering and Management*, 130, p. 188.
- Chen, C. and Hubbard, M. (2012) 'Power relations and risk allocation in the governance of public private partnerships: A case study from China', *Policy and Society*.
- Chettiparamb, A. (2007) 'Steering across scales: applying a strategic-relational approach to a study of land mobilisation for road widening in Kochi', *Journal of International Development*, 19(3), pp. 413-427.
- Chiang, H. and Chia, F. (2005) 'An empirical study of corporate governance and corporate performance', *Journal of American Academy of Business*, 6(1), pp. 95-101.

CivilserviceIndia.com, 'Anna Hazare's movement against corruption'. Available at: <http://www.civilserviceindia.com/subject/Essay/anna-hazare-against-corruption.html> accessed 1 June 2013.

Cockcroft, L. (2012) *Global Corruption: Money, power and ethics in the modern world*. London: I.B.Tauris.

Darvish, H., Zou, P.X.W., Loosemore, M. and Zhang, G.M. (2006) 'Risk management, public interests and value for money in PPP projects: Literature review and case studies', *Proceedings of CRIOCM 2006 International Research Symposium on Advancement of Construction Management and Real Estate, Vols 1 and 2*, pp. 546-557.

De Bettignies, J.E. and Ross, T.W. (2004) 'The economics of public-private partnerships', *Canadian Public Policy/Analyse de Politiques*, pp. 135-154.

De Lathauwer, W. (1999) 'PPP: Public-private partnerships in transport infrastructure financing and construction and their possible application to underground works', *10th Australian Tunnelling Conference – the Race for Space: Keynote Addresses and Asia-Pacific Forum*, 99(1A), pp. 33-39.

Demirag, I. and Khadaroo, I. (2011) 'Accountability and value for money: a theoretical framework for the relationship in public-private partnerships', *Journal of Management and Governance*, pp. 1-26.

Dhawan, H. (2013) 'Govt shifts stand, wants PPP project details revealed', *The Times of India*, 17 April. Available at: <http://timesofindia.indiatimes.com/india/Govt-shifts-stand-wants-PPP-project-details-revealed/articleshow/19587780.cms> accessed 1 June 2013.

Doloi, H.K. and Raisbeck, P. (2008) 'Developing a framework of retained risk in Public-Private Partnership (PPP) social infrastructure projects', *Innovations in Structural Engineering and Construction, Vols 1 and 2*, pp. 1513-1518.

Drabek, Z. and Payne, W. (2002) 'The impact of transparency on foreign direct investment', *Journal of Economic Integration*, 17(4), pp. 777-810.

Edkins, A.J. and Smyth, H.J. (2006) 'Contractual management in PPP projects: evaluation of legal versus relational contracting for service delivery', *Journal of Professional Issues in Engineering Education and Practice*, 132, p. 82.

El-Gohary, N.M., Osman, H. and El-Diraby, T.E. (2006) 'Stakeholder management for public private partnerships', *International Journal of Project Management*, 24(7), pp. 595-604.

Firstpost.com (2011). 'Let there be transparency in PPP projects, says PM'. 12 September. Available at: <http://www.firstpost.com/politics/let-their-be-transparency-in-ppp-projects-says-pm-81935.html> accessed 1 June 2013.

Flinders, M. (2005) 'The politics of public-private partnerships', *The British Journal of Politics & International Relations*, 7(2), pp. 215-239.

Florini, A. (ed.) (2007) *The right to know: transparency for an open world*. New York: Columbia University Press.

Flyvbjerg, B. (2004). *On Measuring the Inaccuracy of Travel Forecasts: Methodological Considerations*. Research Paper. Aalborg, Denmark: Aalborg University, Department for Development and Planning.

Flyvbjerg, B. (2007a) 'Policy and planning for large-infrastructure projects: problems, causes, cures'. *Environment and Planning B: Planning and Design*. 34(4): 578-587.

Flyvbjerg, B. (2007b) 'Five misunderstandings about case-study research', *Qualitative research practice*, pp. 420-434.

Flyvbjerg, B. (2009) 'Survival of the unfittest: why the worst infrastructure gets built-and what we can do about it.' *Oxford Review of Economic Policy*. 25(3): 344-367.

Flyvbjerg, B., Bruzelius, N. and Rothengatter, W. (2003) *Megaprojects and risk: An anatomy of ambition*. Cambridge University Press.

Flyvbjerg, B. and COWI (2004), *Procedures for Dealing with Optimism Bias in Transport Planning: Guidance Document*. London: UK Department for Transport.

Flyvbjerg, B., Holm, M.S. and Buhl, S. (2002) 'Underestimating costs in public works projects: Error or lie?' *Journal of the American Planning Association*. 68(3): 279-295.

Flyvbjerg, B., Holm, M.S. and Buhl, S. (2005) 'How (In)accurate are demand forecasts in public works projects?: The case of transportation'. *Journal of the American Planning Association*. 71(2): 131-146.

Foucault, M. and Gordon, C. (1980) *Power/knowledge*. New York: Pantheon Books.

Froud, J. (2003) 'The Private Finance Initiative: risk, uncertainty and the state', *Accounting, Organizations and Society*, 28(6), pp. 567-589.

Gasper, D. (1997) 'Sen's capability approach and Nussbaum's capabilities ethic', *Journal of International Development*, 9(2), pp. 281-302.

Glaister, S. (1999) 'Past abuses and future uses of private finance and public private partnerships in transport', *Public Money and Management*, 19(3), pp. 29-36.

Goetz, A.M. and Jenkins, R. (2001) 'Hybrid forms of accountability: citizen engagement in institutions of public-sector oversight in India', *Public Management Review*, 3(3), pp. 363-383.

Govt. of India, Ministry of Finance, DOEA (2007) 'Meeting India's Infrastructure Needs with Public Private Partnerships: The International Experience and Perspectives'. International Conference on Meeting India's Infrastructure Needs with Public Private Partnerships: The International Experience and Perspectives. New Delhi, 5-6 February. Available at: [http://pppinindia.com/pdf/conference\\_meeting\\_indias\\_infrastructure\\_needs\\_with\\_public\\_private\\_partnerships.pdf](http://pppinindia.com/pdf/conference_meeting_indias_infrastructure_needs_with_public_private_partnerships.pdf)

Greve, C. and Hodge, G. (2011) 'Transparency in Public Private Partnerships: Some lessons from Scandinavia and Australia'. 1st Global Conference on Transparency Research. Rutgers University, Newark, NJ, 19-20 May.

Grimsey, D. and Lewis, M.K. (2004) 'The governance of contractual relationships in publicprivate partnerships.' *Journal of Corporate Citizenship* 2004(15), pp. 91-109.

Gupta, M.C. and Narasimham, S.V. (1999) 'Discussion: CSFs in Competitive Tendering and Negotiation Model for BOT Projects', *Journal of Construction Engineering and Management*, 124(5), p. 430.

Hale, T.N. (2008) 'Transparency, accountability, and global governance', *Global Governance*, 14, p. 73.

Harvey, D. (1995) 'Globalisation in Question'. *Rethinking marxism: A journal of Economics, Culture & Society*. 8(4): 1-17.

*The Hindu* (2010) 'Three get life in Satyendra Dube murder case'. 27 March. Available at: <http://www.thehindu.com/news/national/three-get-life-in-satyendra-dubey-murder-case/article315939.ece> accessed 1 June 2013.

*The Hindu* (2011) 'Draft Lokpal Bill – civil society version.' 22 June. Available at: <http://www.thehindu.com/news/national/article2123870.ece> accessed 1 June 2013.

Hodge, G.A. (2004) 'The risky business of public-private partnerships', *Australian Journal of Public Administration*, 63(4), pp. 37-49.

Hodge, G.A. and Greve, C. (2005) *The challenge of public-private partnerships: Learning from international experience*. Edward Elgar Pub.

Hodge, G.A. and Greve, C. (2007) 'Public-private partnerships: An international performance review', *Public Administration Review*, 67(3), pp. 545-558.

Hodge, G. and Greve, C. (2008). 10. The PPP phenomenon: performance and governance insights. *Collaborative Governance*, 93.

Hood, C. and Heald, D. (eds.) (2006) *Transparency: The Key to Better Governance?* Oxford: Oxford University Press.

Hood, J., Fraser, I. and McGarvey, N. (2006) 'Transparency of risk and reward in UK public-private partnerships', *Public Budgeting & Finance*, 26(4), pp. 40-58.

Ibrahim, A.D., Price, A.D.F. and Dainty, A.R.J. (2006) 'The analysis and allocation of risks in public private partnerships in infrastructure projects in Nigeria', *Journal of Financial Management of Property and Construction*, 11(3), pp. 149-164.

Indiacore.com, 'Roadways'. Available at: <http://www.indiacore.com/roadways.html> accessed 1 April 2013.

India-in-your-home.com, 'Jharkhand, the tribal state'. Available at: <http://www.india-in-your-home.com/jharkhand.html> accessed 1 June 2013.

Infrastructure Ontario (2007) 'Assessing Value for money: A guide to Infrastructure Ontario's Methodology'. Making projects happen. *Queen's Printer for Ontario* (2007): 4.

Jacobson, C. and Choi, S.O. (2008) 'Success factors: public works and public-private partnerships', *Management*, 21(6), pp. 637-657.

Jamali, D. (2004) 'Success and failure mechanisms of public private partnerships (PPPs) in developing countries: Insights from the Lebanese context', *International Journal of Public Sector Management*, 17(5), pp. 414-430.

Jefferies, M. and McGeorge, W.D. (2009) 'Using public-private partnerships (PPPs) to procure social infrastructure in Australia', *Engineering, Construction and Architectural Management*, 16(5), pp. 415-437.

Joseph, J. (2003). *Hegemony: A realist analysis*. Routledge.

Joseph, J. and Roberts, J.M. (eds.) (2003) *Realism discourse and deconstruction*. London: Routledge.

Kadefors, A. (2004) 'Trust in project relationships – inside the black box', *International Journal of Project Management*, 22(3), pp. 175-182.

Kahneman, D and Lovallo, D. (1993) 'Timid choices and bold forecasts', *Management Science*, 39(1), 17-31.

Kahneman, D. and Tversky, A. (1979) 'Prospect theory: An analysis of decision under risk.' *Econometrica*, 47(2), 263-292.

Ke, Y., Wang, S.Q., Chan, A.P.C. and Lam, P.T.I. (2010) 'Preferred risk allocation in China's public-private partnership (PPP) projects', *International Journal of Project Management*, 28(5), pp. 482-492.

Kenny, C. (2009) 'Measuring corruption in infrastructure: Evidence from transition and developing countries', *The Journal of Development Studies*, 45(3), pp. 314-332.

Klijn, E.H., Koppenjan, J. and Termeer, K. (1995) 'Managing networks in the public sector: a theoretical study of management strategies in policy networks', *Public Administration*, 73(3), pp. 437-454.

Klijn, E.H. and Teisman, G.R. (2000). Governing public-private partnerships: analysing and managing the processes and institutional characteristics of public-private partnerships. In S.P. Osborne (ed.), *Public-private partnerships; theory and practice in international perspective*. London: Routledge, pp. 84-102.

Koppenjan, J.F.M. and Enserink, B. (2009) 'Public-Private Partnerships in Urban Infrastructures: Reconciling Private Sector Participation and Sustainability', *Public Administration Review*, 69(2), pp. 284-296.

Krippendorff, K. (2004) *Content analysis: An introduction to its methodology*. Sage Publications.

Kwak, Y.H., Chih, Y. and Ibbs, C.W. (2009) 'Towards a Comprehensive Understanding of Public Private Partnerships for Infrastructure Development', *California Management Review*, 51(2), pp. 51-78.

*Land Acquisition Act, 1894 with Land Acquisition (Amendment and Validation) Act, 1967* (2003). Allahabad, India: Law Publishers (India).

Leigland, J. and Shugart, C. (2006) 'Is the public sector comparator right for developing countries?' Gridlines-PPIAF. Note No. 4-April 2006.

Levien, M. (2011) 'The Land Question: Special Economic Zones and the Political Economy of Dispossession in India', *The Journal of Peasant Studies*, 39(3-4), pp. 933-969,

Li, B., Akintoye, A., Edwards, P.J. and Hardcastle, C. (2004). 'Risk treatment preferences for PPP/PFI construction projects in the UK', Proceedings, ARCOM Conference, Heriott-Watt University.

Li, B., Akintoye, A., Edwards, P.J. and Hardcastle, C. (2005) 'Critical success factors for PPP/PFI projects in the UK construction industry', *Construction Management and Economics*, 23(5), pp. 459-471.

Li, B., Akintoye, A. and Hardcastle, C. (2001) 'VFM and Risk Allocation Models in Construction PPP Projects', Working Paper for PhD Study, School of Built and Natural Environment, Glasgow Caledonian University, Glasgow.

Linder, S.H. (1999) 'Coming to terms with the public-private partnership', *American Behavioral Scientist*, 43(1), p. 35.

Lokayuktajharkhand.nic.in, 'Summary of Jharkhand Lokayukta Act- 2001'. Available at: <http://lokyuktajharkhand.nic.in/summary.html> accessed 26 April 2014.

Lovaglio, D. and Kahneman, D. (2003) 'Delusions of Success: How Optimism Undermines Executives' Decisions', *Harvard Business Review*, July, pp. 56-63.

Majumdar, R. (2003) 'Infrastructural Facilities in India: District Level Availability Index'. *Indian Journal of Regional Science*, Vol. 3, No. 2

Martimort, D. and Pouyet, J. (2008) 'To build or not to build: Normative and positive theories of public-private partnerships', *International Journal of Industrial Organization*, 26(2), pp. 393-411.

- Mauro, P. (1995) 'Corruption and growth', *The Quarterly Journal of Economics*, 110(3), pp. 681-712.
- Medda, F. (2007) 'A game theory approach for the allocation of risks in transport public private partnerships', *International Journal of Project Management*, 25(3), pp. 213-218.
- Meyer, C.B. (2001) 'A case in case study methodology', *Field methods*, 13(4), pp. 329-352.
- Mia, I., Estrada, J. and Geiger, T. (2007). 'Benchmarking national attractiveness for private investment in Latin American infrastructure.' World Economic Forum. Geneva, Switzerland.
- Miraftab, F. (2004) 'Public-Private Partnerships', *Journal of Planning Education and Research*, 24(1), p. 89.
- Morris, P.W.G. and Hough, G.H. (1987) *The anatomy of major projects: A study of the reality of project management*. (Major Projects Association, Oxford, UK).
- Morris, S. and Pandey, A. (2011) 'Towards reform of the land acquisition framework in India'. *Economic & Political Weekly*, 42(22), pp. 2083-2090.
- Moulaert, F. and Cabaret, K. (2006) 'Planning, networks and power relations: is democratic planning under capitalism possible?', *Planning Theory*, 5(1), p. 51.
- Mukhopadhyay, C. (2008) 'Regional distribution pattern of privatized and foreign investment infrastructure projects in India', ACSP-AESOP Fourth Joint Congress, Chicago, USA, July.
- Mukhopadhyay, C. (2011) 'Are Private Investments Serving the Poor in India?', *Journal of Infrastructure Development*, 3(1), pp. 39-63.
- National Highways Act* (1956) Available at: <http://www.nhai.org/act1956.htm> accessed 1 July 2013.
- Newsjharkhand.com. 'Corruption, instability mark 10 years of Jharkhand'. Available at: <http://newsjharkhand.com/Special.asp?Details=41> accessed 1 June 2013.
- Ngowi, A.B. (2007) 'The role of trustworthiness in the formation and governance of construction alliances', *Building and Environment*, 42, pp. 1828-1835.



- Ngowi, H. P. (2006). Public-Private Partnerships (PPPs) in the Management of Municipalities in Tanzania–Issues and Lessons of Experience. *African Journal of Public Administration and Management*, 17(2), 29-31.
- Noumba, P. and Dinghem, S. (2005) ‘Private participation in infrastructure projects in the Republic of Korea’, World Bank Policy Research Working Paper, No. 3689.
- O’Donnell, G. (1999) ‘Horizontal accountability in new democracies’, in Schedler, A., Diamond, L. and Plattner, M.F. (eds.) *The self-restraining state: Power and accountability in new democracies*. London: Lynne Reinner.
- Ogu, V.I. (2000) ‘Stakeholders’ partnership approach to infrastructure provision and management in developing world cities: lessons from the Sustainable Ibadan project’, *Habitat International*, 24(4), pp. 517-533.
- Olegario, R. (2006). *A Culture of Credit* (Vol. 50). Harvard University Press.
- Parikh, N.C. and Samson, R. (1999) ‘BOT Road Infrastructure Projects: Process, Problems, and Suggestions’, *Vikalpa*, 24, pp. 3-12.
- Patel, S.A., Balic, A. and Bwakira, L. (2002) ‘Measuring transparency and disclosure at firm-level in emerging markets’, *Emerging Markets Review*, 3(4), pp. 325-337.
- Paterson, W.D.O. and Chaudhuri, P. (2007) ‘Making Inroads on Corruption in the Transport Sector through Control and Prevention’, *The Many Faces of Corruption*, p. 159.
- Perera, O., Turley, L., Liebert, T., Silva, M.H., Gonsalves, P., Gupta, A., Manchanda, S., Nelson, S. (2014) 'Value for money in infrastructural procurement: The costs and benefits of environmental and social safeguards in India.' Published by *International Institute of Sustainable Development* with support from *SECO* and *Ministry of Foreign Affairs of Denmark*.
- Piotrowski, S.J. and Van Ryzin, G.G. (2007) ‘Citizen attitudes toward transparency in local government’, *The American Review of Public Administration*, 37(3), pp. 306-323.
- Planningcommission.nic.in, ‘Twelfth Five-Year Plan’. Available at: <http://planningcommission.nic.in/plans/planrel/fiveyr/welcome.html> accessed 1 June 2013.

Planning Commission, Govt of India. 'Tenth Five Year Plan, 2002-2007'. Available at: [http://planningcommission.nic.in/plans/planrel/fiveyr/10th/volume2/10th\\_vol2.pdf](http://planningcommission.nic.in/plans/planrel/fiveyr/10th/volume2/10th_vol2.pdf) accessed 1 June 2013.

ppi.worldbank.org, 'Individual Project Information'. Available at: <http://ppi.worldbank.org/explore/PPIReport.aspx?ProjectID=3614> accessed 20 June 2013.

PPP & Infrastructure Division, Planning Commission, Govt of India (2013). 'Draft Compendium of PPP projects in Infrastructure, 2012'. Available at: [http://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCkQFjAA&url=http%3A%2F%2Finfrastructure.gov.in%2Fpdf%2FDraft\\_Compendium\\_of\\_PPP\\_Projects\\_in\\_infrastructure.pdf&ei=2Wk4UuHRBsSIrQfI84CYBg&usg=AFQjCNHrRZLQnICyt7wCYA9PbCyFSHm5Lw&bvm=bv.52164340,d.bmk](http://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCkQFjAA&url=http%3A%2F%2Finfrastructure.gov.in%2Fpdf%2FDraft_Compendium_of_PPP_Projects_in_infrastructure.pdf&ei=2Wk4UuHRBsSIrQfI84CYBg&usg=AFQjCNHrRZLQnICyt7wCYA9PbCyFSHm5Lw&bvm=bv.52164340,d.bmk) accessed 1 June 2013.

Prat, A. (2005) 'The wrong kind of transparency', *The American Economic Review*, 95(3), pp. 862-877.

Raghuram, G., Bastian, S. and Sundaram, S.S. (2009) 'Mega projects in India Environmental and Land Acquisition Issues in the Road Sector', pp. 601-615, Springer, Netherlands.

Relly, J.E. and Sabharwal, M. (2009) 'Perceptions of transparency of government policymaking: A cross-national study', *Government Information Quarterly*, 26(1), pp. 148-157.

Reuschke, D. (2001) 'Public Private Partnerships in Urban Development in the United States', NEURUS papers.

*Right to Information Act 2005*. Available at: <http://rti.gov.in/> accessed 1 July 2013.

Roach, S.A. (2011). *Law and Politics in Public-private Partnerships: Transparency, Conflict of Interest, and Renegotiation in Concession Arrangements*. PhD dissertation, University of Texas at Arlington.

Roberts, A.S. (2000) 'Less government, more secrecy: Reinvention and the weakening of freedom of information law', *Public Administration Review*, 60(4), pp. 308-320.

Robeyns, I. (2005) 'The capability approach: a theoretical survey', *Journal of Human Development*, 6(1), pp. 93-117.

- Robinson, J. (2002) 'Global and world cities: a view from off the map', *International Journal of Urban and Regional Research*, 26(3), pp. 531-554.
- Rosendorff, B.P., Hollyer, J.R. and Vreeland, J.R. (2011) 'Democracy and transparency.' *The Journal of Politics*, Vol. 73 (4) : 1191-1205.
- Roumboutsos, A. and Anagnostopoulos, K.P. (2008) 'Public-private partnership projects in Greece: risk ranking and preferred risk allocation', *Construction Management and Economics*, 26(7), pp. 751-763.
- Roy, A. (2011) 'Urbanisms, worlding practices and the theory of planning', *Planning Theory*, 10(1), pp. 6-15.
- Russell, A.D., Wang, H.K. and De Zoysa, S. (2003) *Proceedings, Annual Conference - Canadian Society for Civil Engineering*. Available at: <http://www.scopus.com/inward/record.url?eid=2-s2.0-33645710922&partnerID=40>.
- Sayer, R.A. (2000) *Realism and social science*. London, Thousand Oaks, New Delhi: Sage Publications.
- Schedler, A. (1999) 'Conceptualising accountability', in Schedler, A., Diamond, L. and Plattner, M.F. (eds.) *The self-restraining state: Power and accountability in new democracies*. London: Lynne Reinner.
- Sen, A. (1999) *Development as freedom*. New York: Random House.
- Sen, A.K. (2009) *The idea of justice*. London: Penguin.
- Shatkin, G. (2011) 'Coping with actually existing urbanisms: The real politics of planning in the global era', *Planning Theory*, 10(1), pp. 79-87.
- Shen, L.Y., Platten, A. and Deng, X.P. (2006) 'Role of public private partnerships to manage risks in public sector projects in Hong Kong', *International Journal of Project Management*, 24(7), pp. 587-594.
- Siemiatycki, M. (2006) 'Implications of Private-Public Partnerships on the Development of Urban Public Transit Infrastructure', *Journal of Planning Education and Research*, 26(2), p. 137.

Siemiatycki, M. (2007) 'What's the secret? Confidentiality in planning infrastructure using public/private partnerships', *Journal of the American Planning Association*, 73, pp. 388-403.

Siemiatycki, M. (2008) 'Delivering transportation infrastructure through private-public partnerships: are expectations being met?', *Association of European School of Planning and Association of Collegiate School of Planning Joint Congress*, 6<sup>th</sup>-11<sup>th</sup> July, 2008, Chicago, USA.

Siemiatycki, M. (2009) 'Delivering transportation infrastructure through public-private partnerships: Planning concerns', *Journal of the American Planning Association*, 76(1), pp. 43-58.

Siemiatycki, M. and Farooqi, N. (2012) 'Value for money and risk in Public Private Partnerships', *Journal of the American Planning Association*, 78(3), pp. 286-299.

Singh, L.B. and Kalidindi, S.N. (2006) 'Traffic revenue risk management through annuity model of PPP road projects in India', *International Journal of Project Management*, 24(7), pp. 605-613.

Singh, L.B. and Kalidindi, S.N. (2009) 'Criteria influencing debt financing of Indian PPP road projects: a case study', *Journal of Financial Management of Property and Construction*, 14(1), pp. 34-60.

Smyth, H. and Edkins, A. (2007) 'Relationship management in the management of PFI/PPP projects in the UK', *International Journal of Project Management*, 25(3), pp. 232-240.

Smyth, H.J. and Morris, P.W. (2007). 'An epistemological evaluation of research into projects and their management: methodological issues', *International Journal of Project Management*, 25(4), pp. 423-436.

Speak, S. (2012) 'Planning for the needs of urban poor in the Global South: The value of a feminist approach', *Planning Theory*, pp. 1-18.

Stiglitz, J. (1999) *Whither reform*. Washington DC: The World Bank.

Stiglitz, J. (2002) 'Transparency in government', *The right to tell: The role of mass media in economic development* (2002): 27-44.

Stiglitz, J.E. (2003) 'On Liberty, the Right to Know, and Public Discourse: The Role', *Globalizing rights: the Oxford Amnesty lectures 1999*, p. 115.

Strauss, A.L., Corbin, J.M. and Lynch, M. (1990) *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage.

Sundaram, S.S. (2009) 'Formation Process of Public Private Partnership in Transportation Infrastructure in India'. Unpublished Thesis. Indian Institute of Management.

Tanzi, V. (2000) 'Chapter 1: Governance, Corruption, and Public Finance: An Overview', in Conference Proceedings on *Governance, corruption and public financial management*. Salvatore, S.C. (ed), Asian Development Bank, Philippines.

*The Telegraph* (2006) 'Flaws many in the making of bridge: Experts'. 22 May.

Available at: [http://www.telegraphindia.com/1060522/asp/bengal/story\\_6254179.asp](http://www.telegraphindia.com/1060522/asp/bengal/story_6254179.asp) accessed 1 June 2013.

Thomas, A.V., Kalidindi, S.N. and Ananthanarayanan, K. (2003) 'Risk perception analysis of BOT road project participants in India', *Construction Management and Economics*, 21(4), pp. 393-407.

Thomas, A.V., Kalidindi, S.N. and Ganesh, L.S. (2006) 'Modelling and assessment of critical risks in BOT road projects', *Construction Management and Economics*, 24(4), pp. 407-424.

*The Times of India* (2014) 'UPA's land acquisition law likely to be overhauled with many states seeking recast'. 28 June. Available at: <http://timesofindia.indiatimes.com/india/UPAs-land-acquisition-law-likely-to-be-overhauled-with-many-states-seeking-recast/articleshow/37346439.cms> accessed 28 June 2014.

Tiong, R.L.K. (1996) 'CSFs in competitive tendering and negotiation model for BOT projects', *Journal of Construction Engineering and Management*, 122(3), pp. 205-211.

Tiong, R.L.K., Yeo, K. and McCarthy, S.C. (1992) 'Critical success factors in winning BOT contracts', *Journal of Construction Engineering and Management*, 118(2), pp. 217-228.

Treisman, D. (2000) 'The causes of corruption: a cross-national study', *Journal of Public Economics*, 76(3), pp. 399-458.

United Nations Development Programme: Public Private Partnerships for Urban Environment, 'PPP Development stage- Establishing Principles'. Available at: [http://pppue.undp.2margraf.com/en/08\\_2.htm](http://pppue.undp.2margraf.com/en/08_2.htm) accessed 1 June 2013.

US Department of Transportation (2011) 'Value for money: State of the practice'. Delivering Tomorrow's Transportation.

Wachs, M. (1990) 'Ethics and advocacy in forecasting for public policy'. Business and Professional Ethics Journal. 9(1-2): 141-157.

Waldman, A. (2005) 'Mile by Mile, India Paves a Smoother Road to Its Future', *The New York Times*, 4 December. Available at: [http://www.nytimes.com/2005/12/04/international/asia/04highway.html?paganted=all&\\_r=0](http://www.nytimes.com/2005/12/04/international/asia/04highway.html?paganted=all&_r=0) accessed 1 June 2013.

Weihe, G. (2006) 'Public-private partnerships: Addressing a nebulous concept'. Paper presented at the 10th International Research Symposium on Public Management, Glasgow, Scotland.

Weihe, G. (2008) 'Public-private partnerships and public-private value trade-offs', *Public Money & Management*, 28(3), pp. 153-158.

Xu, J. (2008) 'Risks of Public Private Partnership (PPP) Infrastructure Financing in Small Towns', *Proceedings of 2008 International Conference on Construction & Real Estate Management, Vols 1 and 2*, pp. 1474-1477.

Xu, Y., Yeung, J.F.Y., Chan, A.P.C., Chan, D.W.M., Wang, S.Q. and Ke, Y. (2010) 'Developing a risk assessment model for PPP projects in China--A fuzzy synthetic evaluation approach', *Automation in Construction*, 19(7), pp. 929-943.

Yin, R. (2008) *Case study research: Design and methods*. Sage Publications.

Yuan, J.F., Deng, X.P. and Li, Q.M. (2008a) 'Critical Risks Identification of Public Private Partnerships in China and the Analysis on Questionnaire Survey', *2008 4th International Conference on Wireless Communications, Networking and Mobile Computing, Vols 1-31*, pp. 10538-10543.

Yuan, J.F., Deng, X.P. and Li, Q.M. (2008b) 'Risk allocation of Public Private Partnership Projects in China', *Proceedings of the 2nd International Conference on Risk Management & Engineering Management, Vols 1 and 2*, pp. 191-197.

Zhang, G.M., Zou, P.X.W., Huang, C.Y. and Bhuta, C. (2007) 'Risk allocation for public private partnerships in Australia: Literature review and a proposed research', *Proceedings of Criocm 2007 International Research Symposium on Advancement of Construction Management and Real Estate, Vols 1 and 2*, pp. 988-999.

Zhang, X.Q. (2005) 'Critical success factors for public-private partnerships in infrastructure development', *Journal of Construction Engineering and Management-Asce*, 131(1), pp. 3-14.

Zheng, J., Roehrich, J.K. and Lewis, M.A. (2008) 'The dynamics of contractual and relational governance: Evidence from long-term public-private procurement arrangements', *Journal of Purchasing and Supply Management*, 14(1), pp. 43-54.